CYCLOHEXANE: 'BENZENE OF THE FUTURE'

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

June 19, 1961

OPD SPECIAL
'DEPTH' REPORT
PAGE THREE

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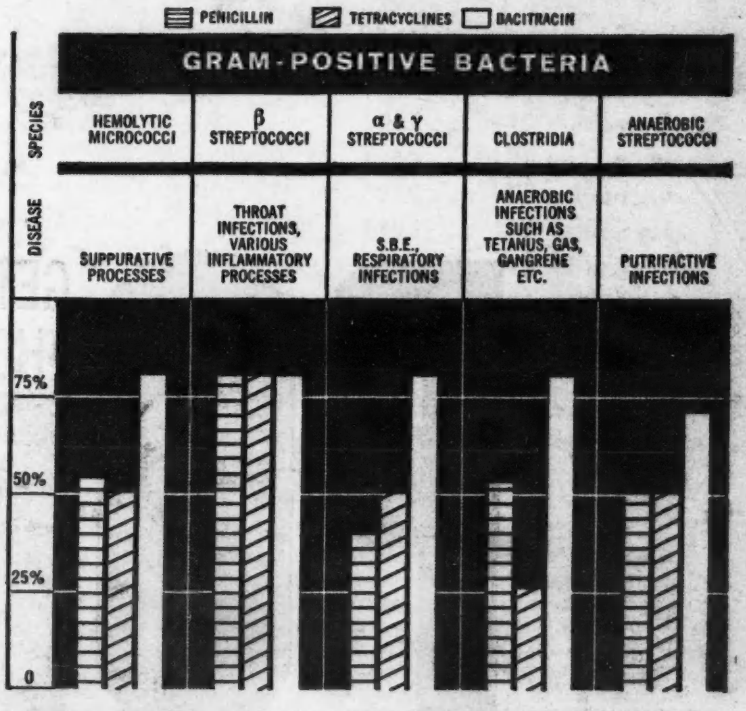

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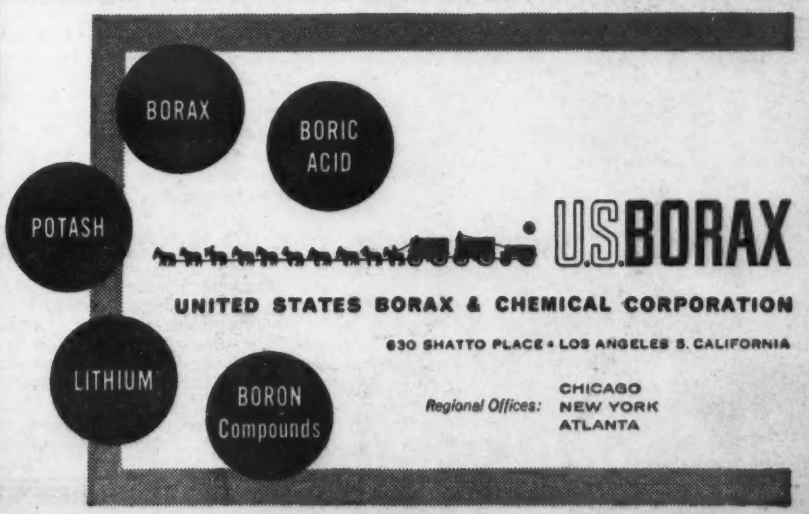

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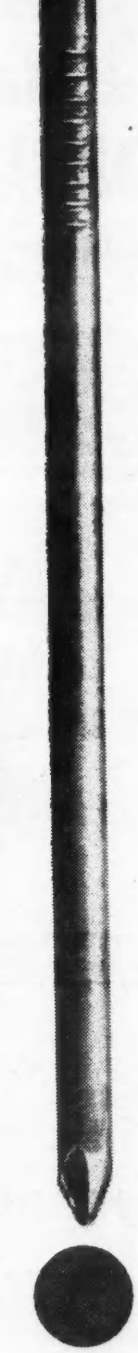

POINT GET THE POINT!

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Oil, Paint and Drug Reporter

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CYCLOHEXANE'S CUSTOMERS
Caprolactam Sends Demand Soaring

	1960*	1961*	1962*
Domestic:			
Chemstrand	22	23	25
Dow-Badische	—	—	10
DuPont	50	52	65
Rohm & Haas	—	—	3
Other	8	10	11
Export:			
Canada	12	12	—
Europe	7	10	18
Japan	1	3	3
Total	100	110	135

*Millions of gallons

Cyclohexane Earns Nickname 'Benzene of Tomorrow' as Goal Is 135 Million Gallons in '62

Cyclohexane consumption in 1962 should reach 135 million gallons (878 million pounds), more than double the 1959 figure of 60 million gallons (388 million pounds). The spectacular growth prospects for this material have led one observer to term it "the benzene of tomorrow." Chief reason is the versatility of cyclohexane, both proven and latent, analogous to that of benzene. Right now, far and away the largest use of cyclo is in the manufacture of adipic acid. But while this will still be the case in the next few years, other burgeoning end-uses will take some of the limelight for themselves.

OPD 'Depth' Report

The key to cyclohexane's exploding growth right now is the sudden rush by producers both in the US and abroad into caprolactam manufacture via the cyclohexane route.

The Jump in Exports

The most startling development affecting cyclohexane along these lines has been the sudden surge in exports. There was an awakening of interest in 1959 from Europe, followed by shipments of some 7 million gallons in 1960, chiefly to Badische Anilin-u. Sodafabrik in West Germany.

BASF now has a 35,000-metric-ton-a-year caprolactam plant, and is in the midst of expanding it to 50,000 tons per annum, based on a cyclohexane process which will also be used by its jointly-owned affiliate (with Dow Chemical Company) at the latter's plant in Freeport, Tex.

Just last fortnight, Imperial Chemical Industries, Ltd., said it would build a 15,000-ton-a-year plant based on a caprolactam process licensed by Emser Werke AG/Inventa AG, of Switzerland.

Toyo Rayon Company, of Japan, has started taking shipments of cyclohexane from Phillips Petroleum Company estimated by outsiders at some 6,000 metric tons a year.

It was announced recently that Toyo, through Mitsui, Ltd., has contracted for shipment of 17,000 tons of cyclohexane over a three-year period from Gulf Oil Corporation, Continental Oil Company, and Chemische Werke Huels, of Germany.

However, at least one of the suppliers named has questioned the accuracy of the report. It is known, however, that Huels, licensor of Toyo's caprolactam process, will supply some cyclohexane.

Toyo is not the only producer expected to use cyclo in its caprolactam venture.

—Continued on page 9

*Caprolactam ex Cyclohexane**

	1962
BASF	110 million lbs./yr.
Dow-Badische	44 million lbs./yr.
DuPont	50 million lbs./yr.
ICI	34 million lbs./yr.
Toyo Rayon	22 million lbs./yr.
Total	260 million lbs./yr.

* These are plant capacities reported based on cyclohexane only. In addition, other caprolactam producers are interested in switching to cyclohexane from phenol as a raw material, both in Europe and Japan.

CYCLOHEXANE'S OUTPUT GROWTH

1962	*135 million gals.
1961	*110 million gals.
1960	*100 million gals.
1959	60 million gals.
1958	50 million gals.
1957	71 million gals.
1956	41 million gals.
1955	33 million gals.

*Estimates.

Source: Tariff Commission (Conversion factor, pounds to gallons, 6.5)

FTC Takes Out After Drugs Ads Wielding a Big Administrative Club

Federal Trade Commission, wielding a new and formidable administrative club in its fight against deceptive practices, is taking out after the pharmaceutical industry to hammer proprietary drug advertising into line. Its first target: hemorrhoid preparations. The weapon: section 6 of the FTC act, which gives the agency broad investigatory powers.

The probe (which covers some random proprietaries in addition to around 150 hemorrhoid products on the market) was revealed last week by Paul Rand Dixon, chairman of the commission, in testimony before a senate appropriations subcommittee headed by Sen. Warren G. Magnuson of Washington.

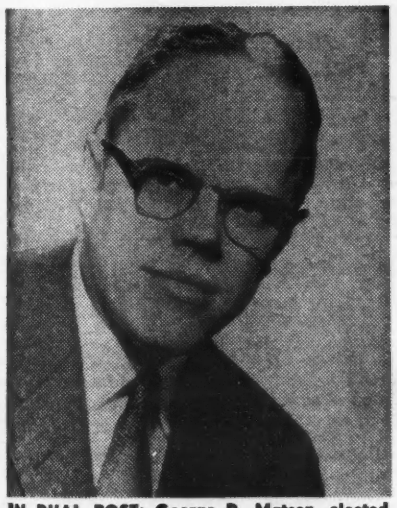
FTC's Sweeping Resolution

Using section 6 as the basis for its authority, FTC has adopted a sweeping resolution directing an investigation of "the organization, business, conduct, practices, management, and relation to other corporations, partnerships, and individuals, of corporations engaged in the advertising, sale and shipment of foods, drugs, cosmetics and devices."

Behind this legalistic jargon is a commission desire to take a "whole-package" approach to the deceptive practices problem, instead of what up to now has been a piecemeal tack.

By invoking section 6, FTC officials are confident that they have just the "en-

—Continued on page 43



IN DUAL POST: George D. Matson, elected financial vice-president and treasurer of Dixon Chemical & Research, Inc., and of Dixon Chemical Industries, Bloomfield, N.J.

Carbon Black Plant: Open Secret Is Out

Apropos of naming a plant manager, United Carbon Company has finally let the trade in on an open secret: The New York-based company has been putting up a $5 million carbon black plant at Port Jerome, near Le Havre, France, and expects initial production early this summer.

The plant will be operated by a new subsidiary, United Carbon France, SA,

—Continued on page 62

Pennsalt Plans to Double Its Alkyl Amines Capacity

Pennsalt Chemicals Corporation will nearly double the capacity of its alkyl amines unit at Wyandotte, Mich. The expansion "results from a combination of increased reactor capacity and improvements to continuous distillation equipment," the Philadelphia-based company says.

Work on the expansion is now underway and will be completed in early 1962.

The $2-million project will increase Pennsalt's capacity to supply ethylamines, isopropylamines and butylamines. The expanded unit will be the largest in the world for making these amines, according to Pennsalt.

This step marks the fifth expansion of Pennsalt's organic nitrogen compounds capacity in the last ten years. The company began producing amines commer-

—Continued on page 43

Chemical Shipping: The Strike Hits Hard

A seamen's strike, tying up the US merchant fleet numbering 946 vessels, promises to play hob with the chemical industry. By press time Friday, OPD determined that shipments in US bottoms were virtually at a standstill.

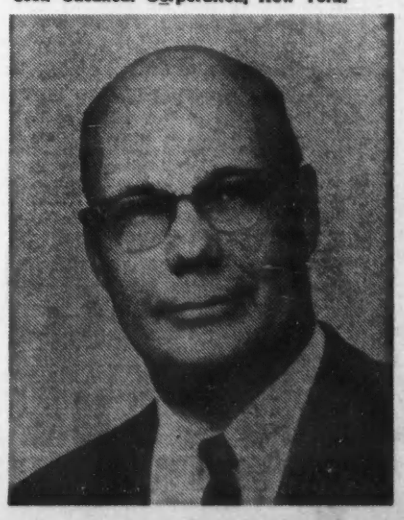
At present, exporters of chemicals not going to Hawaii or Puerto Rico, are working feverishly to transfer loadings to foreign flag vessels.

The intracoastal transportation picture is expected to be the most dismal of all should the labor dispute be protracted. Fuel and petrochemical shipments may be hardest hit, since most transportation from Gulf Coast to Atlantic seaboard points is in domestic tankers.

Inland barge shipments of chemicals

—Continued on page 71

SELLING FARM CHEMICALS: L. S. Madsen, named general sales manager for the agricultural chemicals operations of Olin Mathieson Chemical Corporation, New York.



Vanilla Extract: Standard May Have New Flavor

Food & Drug Administration is now mulling over the setting up of a standard of identity for vanilla extract.

This disclosure was made by Commissioner of Food & Drugs George P. Larrick last week coincident with an order requiring all non-alcoholic carbonated beverages to bear a label declaration of ingredients. The soft drinks requirement will become effective after June 15, 1962.

Soda pop has been exempted from the requirement since January 21, 1941, when an order was issued exempting a number of foods on the assumption that official standards specifying the ingredients for these products could be established within a reasonable time.

FDA says the standards of the program have been delayed far beyond original expectations, for a number of reasons.

On September 17, 1957, all of the remaining unstandardized foods given the exemption were removed from the exempt list with the exception of non-alcoholic carbonated beverages and vanilla extract.

Though vanilla extract standards are now under consideration by the agency, Mr. Larrick reports that "there is no proposal for the standardization of non-alcoholic carbonated beverages and none is contemplated in the foreseeable future."

He adds that there have been a number of consumer complaints over the lack of an ingredients statement, and FDA has now come to the conclusion that the exemption from this requirement should be terminated for non-alcoholic carbonated beverages.

Polyethylene Gets FDA Blessing, Eyes Lush Food Packaging Mart

Busting wide open a market that some say could reach 325 million pounds by 1963, Food & Drug Administration last week gave its official blessing to the use of conventional and high-density polyethylene in food packaging. Operating under a previous temporary okay from FDA, plastics producers are already routing an estimated 85 million pounds of polyethylene into such food packaging uses as milk cartons and bakery trays. However, lacking final approval, many industrial consumers have been somewhat hesitant about going all-out for polyethylene.

Now, with the governmental green light, PE makers expect great things of dairy (butter, cheeses, creams, etc.) and meat (fresh and frozen) outlets.

Besides milk cartons and bakery trays, a big boost is seen for such applications as injection molded lids, containers, blown bottles, coated cups and plates.

Action Could Make Industry Well

Despite the fact that it is late in the year for added food packaging business, there is a growing feeling in the trade that the FDA action could make the highly-competitive polyethylene business well by the end of '61.

What the agency has done is to give all forms of polyethylene the official go-ahead for use in "packaging materials, containers, and equipment intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food."

This means that the plastic material is approved for use in all types of dry and external food packaging. Not yet finally cleared are so-called "cooking pouches," where the foodstuffs are boiled in the original packaging.

The pouches, now permitted under temporary procedures, are now being considered for an extension by the agency. An FDA spokesman indicated that the key roadblock to final clearance of the pouches revolves around the question of the boilability of PE.

The FDA ruling is an outgrowth of information supplied in petitions by Food

—Continued on page 59

Carbide Is Expanding Ethyl Amine Facilities

Union Carbide Chemicals Company is under way on a "substantial increase" in ethyl amine capacity at its Texas City, Tex., installation.

Concurrent with the expansion move, the company has reduced prices of ethylene diamine two cents a pound, effective immediately. Prices are unchanged for triamine, tetramine and pentamine.

Many marketing and production problems have now been overcome, a spokesman for Carbide says, and this is an "advantageous" time to prepare for market growth. Cost, construction timetable and the size of the expansion are undisclosed.

Kefauver Drug Bill: A Brake on Progress

The pending Kefauver drug control bill "would slow down the rate of new drug discovery and defer our ultimate victory over heart disease, cancer and mental illness."

That's the view of John T. Connor, president of Merck & Co., Rahway, N. J., who offered up this grim evaluation at a symposium on the relation of patents to research held in Washington last week under the auspices of the National Research Council.

"By destroying the patent incentive for research," he declared, "this bill could well destroy pharmaceutical research itself.

"It would reduce the great creative

—Continued on page 41

Tetrachlorethane Facility Bids Are Solicited for Gov't

Pittsburgh Plate Glass Company is soliciting bids for machinery and various other property used in the production of tetrachlorethane.

The equipment, owned by the government and located at its Marshall Chemical Corps plant near New Martinsville, W. Va., is being sold by Pittsburgh Plate at the government's request.

The chemical company, which operates an adjoining caustic-chlorine facility, maintains the government-owned facility on a stand-by basis.

Grace's Brazil Installation To Quadruple PA Capacity

Industria Quimica Produtos Ftalicos, SA., a wholly-owned subsidiary of W. R. Grace & Co., New York, will contribute to Grace's expanding position in phthalic anhydride with a quadruple increase in plant capacity at Sao Paulo, Brazil. The plant's potential will be raised from sixty to 240 tons a month.

Work is in progress and the expansion should be completed this year, Grace reports. This additional capacity will be

—Continued on page 54

Hydrogen Cyanide Price Cut

E. I. dupont de Nemours & Co. has posted a reduction of one cent a pound in prices of hydrogen cyanide. Effective immediately, tankcars are newly quoted at 13 cents a pound. DuPont introduced HCN in tankcars in 1955, and has posted periodic reductions with expansion of the bulk market.

The Week's Price Changes

Cedarwood Oil, Ceylon Citronella Oil, Tung Oil Advanced. Coriander Oil, Cottonseed Oil, Tin, Vinyl Chloride Reduced.

Prices Advanced

Cedarwood oil, 10c. per lb. (p. 56).
Citronella oil, Ceylon, 5c. per lb. (p. 56).
Cottonseed meal, $1 per ton (p. 63).
Tung oil, 1c. per lb. (p. 63).
Lemon oil, California, 75c. per lb. (p. 56).
Rosemary oil, 5c. per lb. (p. 56).

Prices Reduced

Cedarleaf oil, 50c. per lb. (p. 56).
Citronella oil, Java-type, 10c. per lb. (p. 56).
Copra, $1 per ton (p. 63).
Coriander oil, 25c. per lb. (p. 63).
Corn oil, crude, ½c. per lb. (p. 63).
refd. ½c. per lb.
Cottonseed oil, crude ½c. per lb. (p. 63).
refd. ¾c. per lb.
Grapefruit oil, 15c. per lb. (p. 56).
Greases, ¾c. per lb. (p. 63).
Hydrofluoric acid, anhyd, bulk, $2 per 100 lbs. (p. 51).
Anhyd, cylinders, $1.50 per 100 lbs.
Aqueous, bulk, $1.90 per 100 lbs.
Aqueous, smaller quantities, $2 per 100 lbs.
Lard, cash, 7/10c. per lb. (p. 63).
Linseed meal, 50c. per ton (p. 63).
expeller, $1 to $2 per ton
Nutmeg oil, East Indian, $1 per lb. (p. 56).
Vinyl chloride monomer, 1.46c. per lb. (p. 45).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

June 16, 1961	June 9, 1961	June 17, 1960
113.08	113.65	110.23

FDA Frets Over Drug Samples

Food & Drug Administration is now worried about a new wrinkle in the allegedly illegal distribution of prescription drugs: the repackaging for sale of hundreds of thousands of free samples initially prepared for distribution to doctors. The practice has mushroomed to such proportions that the agency has launched a nation-wide investigation into the handling of physicians' samples of prescription pharmaceuticals. The situation was turned up last week with the disclosure by FDA of seizure actions involving two New Jersey repackers and wholesalers of drug preparations.

Seizure proceedings have been filed in US District Court against goods in possession of Marshel Sales Company, Palisades Park, and Fall Drug Company, Jersey City.

What the Seizures Included

The government charges that the repacked articles included "Diuril" and "Hydrodiuril," used in the treatment of high blood pressure and heart conditions; "Chloromycetin," "Aureomycin," "Terramycin," antibiotics; "Equanil" and 'Placidyl," tranquilizers; 'Premarin," a hormone; and "Thorazine," a central nervous depressant, and numerous other drugs.

It is charged that the repackaged drugs are not labeled as required by the federal food, drug and cosmetic act. The labels do not bear the statement "Cau-

—Continued on page 62

ADVANCES: John C. Ward, elected vice-president in charge of employee relations for Sterling Drug, Inc., New York. He had been director of industrial relations.

British Fertilizer Quotations Reduced in Sagging Market

While US producers were trying, with mixed success, to firm up the fertilizer price structure, their British counterparts last week bowed to market pressures and lowered prices $1.75 to $2.80 a ton.

Fisons, Ltd., custodian of about 40 percent of the mixed fertilizer market, cut its line of nitrogen compounds by $1.05 a ton.

Imperial Chemical Industries, Ltd., followed with cuts of $2.80 a ton for compounds, $3 a ton for nitrogen-chalk brands and $1.75 for ammonium sulfates.

Late in the week Shell Chemical Com-

—Continued on page 71

Sardinia Will Be the Site Of Big Chemical Complex

Rumianca Spa, of Italy, has slated a major chemical complex for Sardinia. Included will be a caustic-chlorine unit and petrochemical facilities for polyvinyl chloride and polyethylene.

In other expansion moves, Rumianca has slated a 70 percent boost in DDT production and, with Noury & van de Lande of Holland, has created the firm Noury-Rumianca in Avenza to produce 3,000 tons of citric acid a year.

Index to News and Market Reports

Association News

Plant Food Institute Names Hall..... 65
Plant Food Institute Views Farm Market 7

Government News

Chemical Men Against Railcar Rent Hike 6
Chemical Men Decry Kennedy Tax Plan 5
Drugs Not 'Discoveries' Court Rules.... 5
FDA Frets Over Drug Samples..... 4
FDA Gives GRAS Status to Spices..... 7
FTC Cracking Down on Drug Ads..... 3
Phosphate Prospecting Rules Changed.. 5
Talc Offered by GSA..... 7

Industry News

Allied Starts Up 'Genetron' Unit..... 71
Allied to Acquire Plant Site..... 65
Biddle Sawyer Moving..... 41
Carbide Expanding Ethyl Amine Facilities 4
Carbide Markets Plastic Case..... 62
Caustic Potash Offered..... 41
Cellophane Gets FDA Approval..... 58
Chemical Reprocessing Job Still Open.. 7
Chemical Sales Up, Profits Off..... 7
CSC, Diamond Covet Western Firm.... 8
Cyanamid Boosts Phosphate Capacity... 5
Cyclohexane Consumption to Double.... 3
Cyclohexane: 'Depth' Report..... 3
Called "Benzene of Tomorrow"..... 3
Customers' Roster..... 3
End-Use Pattern..... 9
Output: 1956-1962..... 3
Producers and Plant Capacities..... 9
Usage in Caprolactam..... 3

Eastman Researching Genistic Acid..... 70
Erco Fertilizer Unit Nears Completion.. 43
Fertilizer Prices at Cross-Purposes..... 47
GE Markets New Silicones..... 70
Hydrated Alumina Output Started..... 41
Hydrofluoric Acid Market Buckles..... 40
Hydrogen Cyanide Price Cut..... 4
Kefauver Bill Scored by Merck Head... 4
PPG's Caustic Unit Struck..... 55
Methanol, VAc Plants Set by Borden.... 5
Monochem to Be Supplied by Morton.. 5
Pennsalt Adding Alkyl Amines Capacity. 3
Polyethylene Gets FDA Okay..... 4
Pfizer Buys Paul-Lewis..... 5
Pfizer Offers Plasticizer Data..... 70
Phenolic Extrusions Introduced..... 62
Plasticizer Output Sets Record..... 7
Polyethylene Pipe Use Boost Seen..... 62
Polyurethane Elastomers Report..... 59
PPG's Caustic Unit Struck..... 55
Sodium Silicate Unit Going Up..... 7
Sohio Offers New Grade Urea..... 58
Sulfur News: Good, Bad..... 7
Sulfur Via Bacteria Seen..... 42
Tetrachlorethane Bids Solicited..... 4
Urethane Rubber Sales Charted..... 59
Vanilla Extract Standard Proposed..... 3

International News

British Fertilizer Prices Slashed..... 4
Carbon Black Plant Going Up O'Seas... 5
Chemical Mergers Common O'Seas..... 7
French Firms in Joint Venture..... 6

Grace Adding PA Capacity in Brazil.... 4
Phthalic Anhydride Unit Slated..... 5
Sardinia to Be Site of Chemical Complex 4

Personnel News

Baxter Laboratories Appoints Lehrman.. 8
California Chemical Names Taylor..... 7
Dixon Chemical Elects Matsen..... 3
Olin Mathieson Names Madsen..... 3
Quaker Oats Appoints Wittekindt..... 7
Sterling Drug Elects Ward..... 4
United Carbon Names Treadgold..... 6

Market Reports

Acids 40
Agricultural Chemicals 47
Aliphatic Organics 45
Aromatic Chemicals 58
Botanical Drugs, Gums 54
Coal Chemicals 48
Coating Materials 61
Drugs 50
Essential Oils 56
Fats & Greases 63
Fertilizer Materials 47
Fine Chemicals 50
Heavy Chemicals 40
Industrial Organic Chemicals..... 45

Metals Nonferrous 40
Naval Stores 62
Oil Cake and Meal 64
Oils 63
Paint Materials 61
Pesticides 47
Petrochemicals 45
Petroleum Derivatives 60
Protective Coating Materials 61
Spices 56
Trade Name Chemicals 59
Waxes 64

General Features

Advertisers' Index 70
Association Meeting Dates 38
Bids Wanted 67
Classified Advertisements 70
Coal Chemical Output 48
Crude Oil Stocks 60
Current Market Quotations 10
Editorials 39
Imports 71
Obituaries 67
OPD 'Depth' Report: Cyclohexane..... 3
OPD Price Index 4
OPD Reports From Europe 7
Washington Talks It Over..... 39

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DEVELOPMENT HEAD: Dr. G. Philip Lehrman, appointed manager of pharmaceutical development for Baxter Laboratories, Inc., Morton Grove, Ill.

Chemical Men Against Freight Car Rent Hike

Chemical producers don't like the looks of two senate bills (S 886 and S 1840) which would permit the Interstate Commerce Commission to raise the daily charge for freight car rentals from its present maximum of $2.88.

Designed to ease the recurring shortages of freight cars, the measures would allow ICC to set higher daily rental rates as a spur to expanded car ownership by the railroads.

In a written statement forwarded to the senate commerce committee last week, Manufacturing Chemists' Association opposed the legislation on these grounds:

- It is punitive and generally works a hardship on carriers least able to send it, and, at the same time, it fails to accomplish its stated objective.
- Any increase in the carriers' operating costs usually results in a plea for higher freight rates, which, if granted, would nullify completely the intended purpose of the legislation.
- Several times in the past, during stress periods, penalty per diam has been tried but there was no evidence of any increased car supply.
- This method of approach merely adds to the cost of doing business that must eventually be assumed by the consumer.

Methanol, Vinyl Acetate: Borden Makes It Official

It's official: Borden Chemical Company will build a methanol plant (25 million gallons a year) and a vinyl acetate monomer plant (50 million pounds a year) in Geismar, La. OPD reported the company on the verge of announcing plans in its last issue (OPD, 6/12/61).

The New York-based firm will spend $15 million to put up its two units adjacent to raw material supplier Monochem, Inc., jointly owned with US Rubber Company.

Monochem will supply Borden methanol and vinyl acetate facilities with all needed raw materials except acetic acid for the VAc monomer, which will be bought.

United Engineers & Constructors, Inc., Philadelphia, has been awarded contracts for the facilities. The project should be completed by mid-1962.

The methanol plant will employ the Inventa-Vulcan process, the same as is used by Borden's Brazil affiliate plant, Alba SA. The VAc plant will take 20 percent of Monochem's 80-million-pound-a-year acetylene output.

Chemical Industry Is Unhappy Over Four Other Tax Schemes Hatched Along New Frontier

The chemical industry—which feels the Kennedy tax program doesn't tighten the screws enough on cooperatives (OPD, 5/29/61) and is disappointed about its treatment of foreign income (OPD, 6/12/61)—is downright unhappy about four other revenue schemes hatched along the New Frontier. The industry's objections came to light last week in a letter sent by John E. Hull, president of the Manufacturing Chemists' Association, to Rep. Wilbur D. Mills, chairman of the house ways and means committee.

MCA regards the President's proposal for tax credits as an incentive for modernization and expansion as "too complex" and one which offers "too little help" in solving "the serious problems of replacement or rehabilitation of obsolete plant and equipment."

The Dividend Withholding Idea

The association is convinced that employees' pension trusts (now exempt from income tax) "would be placed at a disadvantage if the [dividend and interest] withholding provision recommended by the President were to be enacted."

Repeal of dividend credit, it contends, "would reduce the ability of the business community to raise equity capital, and business, both large and small, would have to look to the borrowed money market."

"Unwise" is MCA's word for Mr. Kennedy's notion that business entertainment costs be disallowed as tax deductible items and that expenses incurred on business trips be limited to $30 a day.

Commenting on the tax credit idea, Mr. Hull writes: "Business today must make long-range plans with respect to modernization and expansion, and if the economics of a planned expansion are subject to administrative changes in or even the repeal of the tax credit, corporate planning will be made even more difficult than it is already.

"In some instances, the proposed credit could be helpful as a stop-gap measure but, in our opinion, overall depreciation reform is badly needed, if we are to modernize our plants, advance technology, increase production and strengthen our national economy."

Arguing against the imposition of withholding taxes on dividends and interest, the MCA president contends that the effect of such an action on growing pension funds "would be to reduce the amount of funds currently available for investment, resulting in loss of income and less ability to pay out pensions."

Repeal of the dividend credit, he continues, "would mean larger interest payments, reducing the revenue gain of the

—Continued on page 44

Phthalic Anhydride Unit Slated for Hull, England

A 35-million-pound-a-year phthalic anhydride unit will be built at Hull, England by Grange Chemicals, Ltd., a British firm jointly owned by British Hydrocarbon Chemicals, Ltd., and California Chemical Company.

The plant, situated adjacent to the Salt End Chemical Works of Distillers Company, Ltd., at Hull, is slated for completion during the second half of 1962. Contract for engineering, design and construction has been awarded to Badger, Ltd.

California Chemical, a subsidiary of Standard Oil Company of California, will have a one-third interest in the venture. British Hydrocarbon is a joint subsidiary of British Petroleum Company, Ltd., and Distillers Company.

ASSUMES FISCAL DUTIES: A. G. Troedgold, vice-president in charge of manufacturing for United Carbon Company, Houston, Tex., just named to an additional post: company treasurer.

Drugs Not 'Discoveries' Under Revenue Rules

Drugs are not "discoveries" in the revenue law sense and, therefore, are ineligible for special Korean War tax relief. So ruled the Supreme Court in a unanimous decision last week.

The case involved G. D. Searle & Co., a Chicago drug firm, and Polaroid Corporation, a photographic equiment maker in Cambridge, Mass.

Together they sought the return of $4 million in protested taxes on the grounds that their inventions deserved the special wartime tax status accorded to mineral discoveries.

Searle asked for relief from excess profits taxes on "Dramamine" and "Banthine," drug relaxants, arguing that the two pharmaceuticals were the results of years of research prior to the Korean War.

A Federal District Court quickly disallowed the claim, but the US Court of

—Continued on page 62

Cyanamid Will Double Triple Super Capacity

American Cyanamid Company will increase granular triple superphosphate capacity at Brewster, Fla., from a current 200,000 pounds annually to 400,000 pounds.

In addition, a new course triple superphosphate and an increased supply of run-of-pile material will be available. The added capacity is expected to be on stream in early 1962.

This latest expansion is part of Cyanamid's long term program for high-analysis fertilizer. A doubling of phosphoric acid capacity, announced in 1960, is expected to be completed soon.

CSC vs. Diamond: Western Concern Coveted by Both

The banns were published and the merger of Diamond Alkali Company and Chemical Process Company looked like a certainty last week—and then Commercial Solvents Corporation entered the picture with a bid to buy up 200,000 shares of Chemical Process stock at $15 a share.

It soon developed into anybody's guess which of the big contenders would succeed in grabbing up the West Coast specialties producer. Diamond, from headquarters in Cleveland, Ohio, quickly matched the CSC offer, and a spokesman of CSC said late in the week that the company had no plans to raise its bid.

Standing Pat on Agreement

Meanwhile, Diamond and Chemical Process stood pat on their merger agreement (OPD, 5/29/60) which remains subject to stockholder approval at meetings to be held in August.

The merger pact calls for an exchange of stock, which at current market valuation would net Chemical Process holders $11.50 a share.

At a glance the $15 purchase offer seemed to top this, but observers pointed out that the exchange agreement is on a tax-free basis. Hence, for large holders or those who acquired their stock at much lower prices, the merger might prove more attractive than the cash proposal.

In any case, CSC officials in New York will not disclose yet how much Chemical Process stock its bid has attracted or how much its original "substantial" holdings amounted to.

Diamond's position of offering two alternatives seems to many observers to give it the inside track. Those holding to this view also note that a merger bid by CSC about two months ago was turned down by Chemical Process directors. Conceivably, there had already been discussions with Diamond, and its offer was found more attractive.

Chemical Process, based in Redwood City, Calif., is one of the coast's most dynamic specialty firms. It produces ion-exchange resins, polyester resins and adhesives. A growth pattern of about 20 percent a year continued in 1960 with sales of $6.1 million, as against $5.1 million in 1959 and $2.2 million in 1955.

Alexis E. Post, chairman of the board of Chemical Process, said last week that

—Continued on page 54

Pfizer Buys Paul-Lewis, Milwaukee Enzyme Maker

Chas. Pfizer & Co., has contracted to buy up all the outstanding stock of Paul-Lewis Laboratories, Inc., Milwaukee, Wis., a firm specializing in enzyme production, research and technology.

Paul-Lewis will become a subsidiary of Pfizer, with Paul Halmbacher continuing as president. Acquisition will be based on an exchange of about 60,000 shares of Pfizer common stock for all outstanding stock of the enzyme producer.

Paul-Lewis, with its plant as well as administrative offices in Milwaukee, manufactures enzyme products for the dairy and brewing industries, as well as specialty enzymes for pharmaceutical, food and paper producers.

Monochem Is Customer For New Morton Plant

Morton Chemical Company will build an anhydrous hydrogen chloride plant at its Geismar, La., complex to supply Monochem, Inc., on a long-term basis. The Morton Salt Company subsidiary plans to have the unit on stream by early 1962.

An agrement covering sales to Monochem was signed last week by its joint owners—Borden Chemical Company and US Rubber Company—and Morton.

Now under study by Morton is production of still other chemicals at the Geismar site—the company's fourth in the US.

Phosphate Prospecting Put Under New Gov't Rules

Department of the Interior has come up with a new permit-lease system for phosphate prospecting in place of the old non-competitive lease method. Interior Secretary Stewart L. Udall says that under the new regulations phosphate prospecting and development on federal lands will be conducted under the same systems used for coal, sodium, sulfur and potassium.

The new rules provide for issuance of two-year prospecting permits covering up to 2,560 acres each. An annual rental of acreage limitation of 10,240 acres for phosphate leasing will also apply to prospecting permits and leases.

Under the new rules the person or company holding a prospecting permit will have exclusive rights to prospect for phosphate on the area covered by the permit.

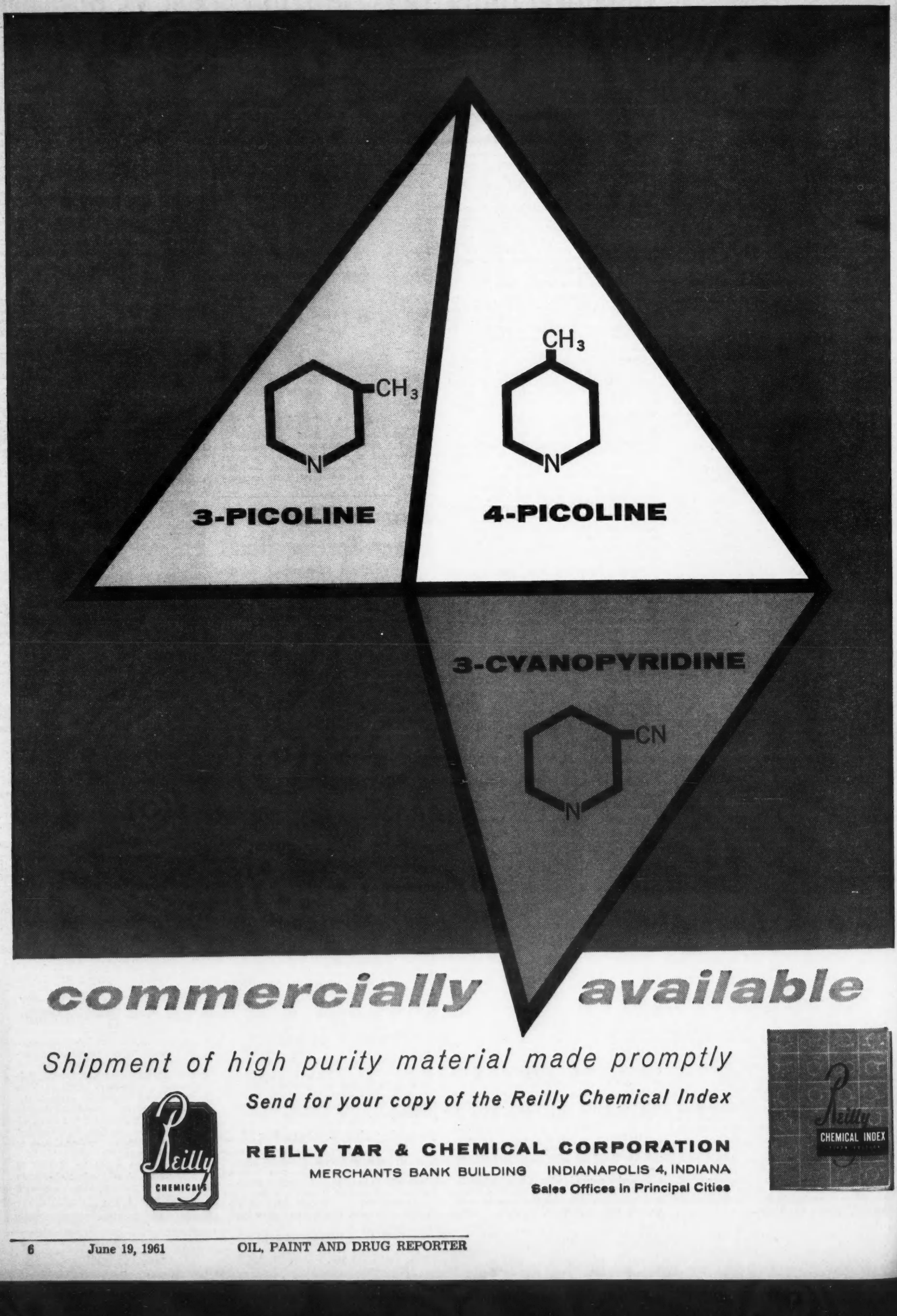
The permit could be extended for up to four additional years. If a valuable deposit of phosphate is discovered, the person holding the permit will be given the right to lease the land containing the deposit.

Phosphate production from federally-owned lands amounted to about 1.4 million tons last year, an increase of some 400,000 tons over 1959. Production came from lands in Idaho, Montana and Florida.

The amendments were offered up by Interior last October and a public hearing was held on the proposed rules in March of this year.

French Joint Venture Set

A new producer of acetic acid and aliphatic acids, to be called Rhone-Progil, will be established by the two French Chemical concerns, Societe Rhone-Poulenc and Societe Progil. A plant to be constructed at Pont-de-Claix is expected to be on stream by the end of 1962.



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Sulfur News: Good, Bad

Report to the United States sulfur industry: The news is good from India, but not so good from Canada. Such is the gist of an outlook study on sulfur sales to the Indian fertilizer industry, an area which is expanding rapidly and under the country's Third Five-Year Plan is expected to double or triple its imports of the material. The US has traditionally been the big sulfur supplier—furnishing most of India's needed 140,000 long tons per year—but now it appears that Indian consumers are looking hungrily to Canada as a supplier.

Why the switch? It is said that the Indian consumers "appear anxious to find alternative suppliers to the sulfur export syndicate of the Gulf states in the US, although sulfur from that source is currently being landed in Indian ports for as little as US $29-$30 c.i.f. per long ton."

And here are the words from Canada's Department of Trade & Commerce that are having an unsettling effect on the US industry:

"Canadian producers, if they are able to settle transportation problems and are prepared to meet stiff competition from existing US suppliers (probably from France as well) could find India a potentially significant outlet for many years to come."

That seems an understatement in light of the next official Canadian quotation:

"Provided fertilizer and hence sulfuric acid production expand as planned, India's requirements of sulfur may be expected to climb to

—*Continued on page 44*

OPD Reports From Europe

Chemicals Industry in Europe: A Ferment of Mergers, Take-Overs

The ferment of merging, take-overs and trading agreements continues in the European chemical industry. Imperial Chemical Industries, Ltd., of Britain, is bidding for Settle Limes, Ltd., a small quarrying concern; LaPorte Industries, Ltd., another British firm, has acquired Elektrochemische Werke AG of Munich, which produces in Germany many of the same products; Chemische Fabriek "Naarden" of Holland is going into tall distillation in a venture with United States and Finnish partners, and Etab. Clin-Byla of France has signed an agreement with G. D. Searle & Co. of Chicago and has almost negotiated one with Duphar, the drug division of big Philips Lamp of Holland.

Raymond Comar, president of Clin-Byla, told shareholders at the annual meeting about both agreements. Rumors of Clin-Byla deals had been circulating in Paris for weeks. The agreement with Philips will allow Clin-Byla to exploit in France and the franc zone the drug products of Duphar-CB, a company jointly owned by Clin-Byla and Philips.

Searle Details Hush-Hush

The subject matter of the accord with Searle was not disclosed. Mr. Comar notes that Clin-Byla's own research program is beginning to yield results which are being exploited in foreign countries through licenses or by affiliates, particularly in the US and Canada.

Laporte Industries, British chemical concern, acquired Elektrochemische Werke of Munich in a $4 million stock and cash deal. Both firms now produce a similar line of products and Laporte currently uses an EWM process for sodium chlorite.

EWM's major products are hydrogen peroxide, persulfates, chlorites and similar chemicals. Its major customers are the plastic, textile and paper industries of Germany and Europe. Its 1960 sales are not disclosed but profits, equal under

—*Continued on page 65*

IN SALES POST: Roy H. Wittekindt, appointed southern district sales manager by the chemicals division of Quaker Oats Company, Chicago. He will headquarter in Chicago.

Chemical Sales Up, But Profits Are Down

Chemical business is picking up slightly, but the squeeze on profits is getting worse. That's the economic message contained in the latest quarterly financial report made public jointly last week by the Federal Trade Commission and the Securities & Exchange Commission.

Sales of chemical and allied products in the first quarter of this year totaled $6.481 billion, which compares with $6.402 billion in the fourth quarter and $6.678 billion in the first three months of 1960.

Chemical profits after taxes, however,

—*Continued on page 55*

FDA Gives the Final Okay To 82 Spices, Seasonings

Food & Drug Administration made it final last week, according GRAS ("generally recognized as safe") status to eighty-two spices, seasonings, essential oils and natural extractives.

The action follows through on an FDA proposal of over a year ago (OPD, 5/23/60). The final list published last week shows no changes from the one originally suggested.

Plant Food Institute Gets Tip: Do Not Write Off the Farmer; He Is Still a Pretty Big Man

Don't write off farming as a declining market for the products of the fertilizer industry. While the number of agriculture workers may be 3 million fewer than a decade ago, farms still employ more workers than the steel, automobile, transportation and public utilities industries combined. Agriculture has an investment exceeding $203 billion and farmers spend over $25 billion a year for goods and services to produce livestock and crops.

These are facts the fertilizer industry should keep in mind in assessing the future markets for its products, it was emphasized to the industry last week by J. E. Streetman, vice-president and director of marketing of Ralston Purina Company, St. Louis, Mo., in an address to the annual convention of the National Plant Food Institute.

'Sign of Strong Industry'

Speaking in White Sulphur Springs, W. Va., Mr. Streetman said that while the decline in farm population is considered alarming by some politicians, it is in itself a sign of a strong, healthy industry. His reasoning was this: With three million fewer workers the industry is producing two-thirds more than it did a decade ago —a remarkable increase in production efficiency that can be matched by no other sector of American economy.

Mr. Streetman said that the "man who needs our products and your (fertilizer industry's) products is not going out of business, he's going into a bigger business. His investment is larger, his risks are greater. But this larger, more efficient farmer of today approaches his problems and studies his investments as an industrialist does.

"He demands of his suppliers technical competence and a clear understanding of his operating problems. As we learn to concern ourselves less about his size and more about his needs we will earn not only his business but his respect and his loyalty as well. In our industry, as I'm sure in yours in the long run, how well we serve will determine how well we prosper."

Dr. Pierre A. Rinfret, vice-president and director of the economics division of Lionel D. Edie & Co., New York, had some good news for the industry on the business outlook. He said that the American economy has weathered the recession and "new economic records are going to be made in the balance of this year."

He listed six major changes taking place in the economy which are providing "new ground rules for economic growth": The age structure of the population is changing its capital spending programs by putting an increasing part of its capital into research and development, industry is trying to reduce its capital investment in inventories, the consumer is changing

—*Continued on page 65*

SECTION MANAGER: Herbert W. Taylor, named manager of the resin sales section of surface coatings and plastics chemicals, by Oronite Division of California Chemical Company, a subsidiary of Standard Oil Company of California, San Francisco.

Talc From Nat'l Stockpile Is Placed on Block by GSA

General Services Administration will sell off some 1,978 short tons of ground steatite talc from the national stockpile. The material is offered for sale "as is" f.o.b. at two Pennsylvania storage locations.

Most of the talc (1,511 short tons) is stored at the Marietta Air Force Station at Marietta and the balance is at Letterkenney Ordnance Depot, Chambersburg (Culbertson).

The talc is from domestic sources and is of a type used for dies in the production of electron tube insulators.

Requests for the bid invitation should be made by telegram to the director of GSA's Project Administration Division, Defense Materials Service, Washington 25, D.C. Bids for the talc will be opened by GSA on July 6.

Plasticizers Roll Up Record High for 1960

Output of plasticizers hit a record high in 1960, totaling 602 million pounds, up from 539 million in 1959, the Tariff Commission reports. But part of the increase is accounted for by broader coverage of producing firms, the commission notes.

Sales in 1960 amounted to 500 million pounds, valued at $149 million, up from 476 million pounds, worth $142 million in '59.

Production of cyclic plasticizers in 1960, which consisted chiefly of phthalic anhydride and phosphoric acid esters and complex polymerictype materials, amounted to 445 million pounds, compared with 403 million pounds in 1959. Sales were 384 million pounds, valued at $103 million, compared with 362 million pounds, valued at $98 million.

Production of acyclic plasticizers amounted to 157 million pounds, compared with the 136 million pounds reported for 1959. Sales were 116 million pounds, valued at $45 million, compared with 115 million pounds, valued at $44 million, in 1959. Principal products included in the acyclic class are esters of adipic, azelaic,

—*Continued on page 58*

Sodium Silicate Facility Being Built in Southeast

Chemical Products Corporation, Cartersville, Ga., has started construction on a plant which will reportedly represent the first basic sodium silicate operation in the southeast. Located at Cartersville, the facility is expected to be completed by October, with production following shortly thereafter.

Initial production will include most of the commonly used solution grades, an anhydrous glass grade and sodium metasilicate pentahydrate. The plant is being built next to the company's existing barium chemicals facility.

Chemical Reprocessing: AEC Still Banking on Industry

Though Atomic Energy Commission has given up for the time being on industry as a producer of fission product concentrations from nuclear fuel wastes (OPD, 6/5/61), it is still hopeful that some private group will make the plunge into chemical reprocessing.

This area consists of reprocessing fuel elements from experimental, prototype and full-scale civilian power reactors, from test and research reactors, and from critical assemblies.

However, according to Ernest B. Tremmel, director of AEC's Office of Industrial Participation, "it now appears that it will be one or two more years before the most actively interested group plans to reach a firm decision to proceed."

Meanwhile, he told the Institute of Nuclear Materials Management in Denver, Colo., last week, the commission has put off the processing of such power reactor fuels in AEC facilities.

Instead, he reported, the commission is building facilities at Savannah River to receive and store irradiated fuels for processing at a later time.

The AEC official gave no indication that the agency has lost patience with industry, saying merely that the commission "is following closely" the progress of the one active group in the field (IRG).

What's more, he gave the industry project his blessing, expressing the hope that it "will result in the construction and operation of a privately-owned chemical processing facility."

Meeting Dates
May Be Found
On Page 38

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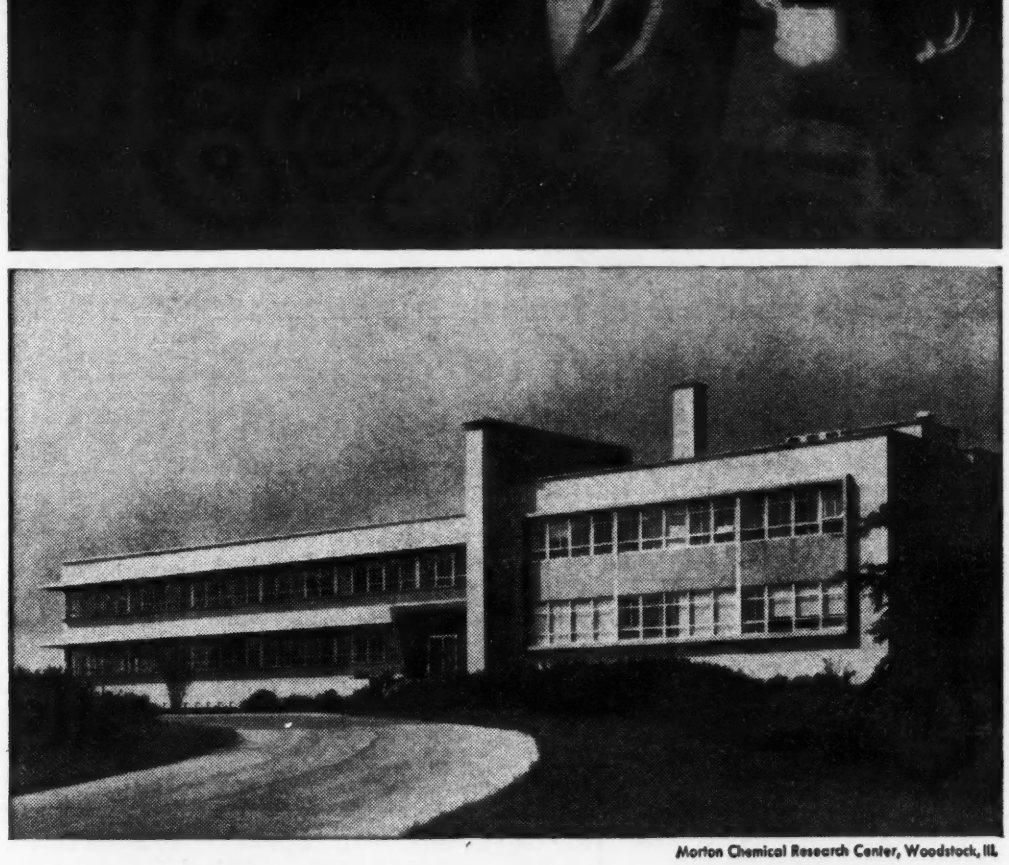

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Cyclohexane Dubbed 'Benzene of Tomorrow': 135 Million Gallons in '62

OPD 'Depth' Report on Cyclohexane

As one observer here has put it, Japanese producers "have been taking out licenses like crazy" and when the dust settles, it's more than likely US cyclohexane makers will pick up a tidy amount of trade.

It's more than likely that Europe, too, will see a proliferation of capro-from-cyclo plants. Reasons for the sudden caprolactam-nylon-6 surge overseas aren't hard to find.

The European economy of the sixties might be likened to the US economy of the fifties. Then, here, the economy rode upon the crest of rocketing automobile production. Now, in Europe, auto production is soaring as disposable income rises.

This means a rapid growth of refinery complexes on the continent, for more fuel, combined with a boom in synthetic rubber consumption, which leads back to tire cord demand.

Circumventing Nylon-6/6

Since E. I. duPont de Nemours & Co. and ICI have had nylon-6/6 pretty well to themselves, it is logical that European producers, recognizing the worth of polyamide tire cord fibers, should choose another route to them, through caprolactam.

Producers of caprolactam in Europe include BASF, Farbenfabriken Bayer AG (from phenol), the Dutch firm Algemene Kunstzijde Unie (AKU) (also from phenol) and the Swiss firm Inventa.

Production is now reported, or scheduled, in Czechoslovakia, the Soviet Union, East Germany, Hungary and India. The Italian firm of ITACO makes caprolactam at the rate of 20,000 tons a year, from phenol.

This buildup in caprolactam, then, can be attributed partly to the rise in demand for polyamide fibers, particularly for tire cord. It can also be attributed to coming high tariffs in the European Common Market area on importation of rayon pulp for tire cord.

One observer freshly back from Europe reports that nearly all caprolactam plants are expanding, or on the verge of expansion, and that producers there are not at all sure that expanded capacities will take care of future needs.

Cyclohexane Future Bright

All this bodes well for cyclohexane, and on the fact of it, estimated European business in 1962 of at least 18 million gallons from US producers, compared with only 7 million gallons last year, makes for a bright future.

Further, feeling is strong that future expansions will be based generally on cyclohexane; although it is in this area that some clouds appear.

Fact is that caprolactam can be made from a number of raw materials. National Aniline Division of Allied Chemical Corporation has the largest caprolactam plant in the world at Hopewell, Va., with an estimated capacity of 130 million pounds annually. Raw material: phenol.

In addition, Snia Viscosa, Italian associate of the British firm Courtaulds, Ltd., has developed a process for making caprolactam from toluene, theoretically a much cheaper material to use than cyclohexane.

Allied has obtained a Snia Viscosa license to back up its own phenol route, as have ICI in England and other producers in Europe and Japan.

Perhaps the most mysterious note of all in this disharmony of raw materials is a request put forth by the Soviet Union last year for a 10,000-ton-a-year plant to produce caprolactam from aniline.

Allied, foremost proponent of the phenol route, believes it can stay competitive with cyclohexane. Further, raw material price advantage offered by the Snia Viscosa toluene process could make it a serious threat to cyclohexane. As far as aniline is concerned, only the inscrutable minions of the Soviet chemical industry know.

Cyclohexane-to-Caprolactam Route

But cyclohexane producers in the US are of the firm belief that their product will be the future basis of caprolactam production. The two strongest props in their faith are furnished by duPont and BASF.

While duPont isn't talking about its process, it's generally felt in the cyclo industry that it is "stunningly" economical, involving a tricky direct nitration setup which eliminates a number of intermediate steps taken in other processes.

One story is told about how Ohio River Chemical Company, a joint venture of Spencer Chemical Company and Industrial Rayon Corporation, broke ground in 1959 for a 20-million-pound-a-year caprolactam plant and even hired a plant manager. Output would have been based on phenol.

Then, the report has it, the bomb fell. DuPont supposedly came along and offered caprolactam to the infant company at a price so little over Ohio River Chemical's estimated production costs that plans were quietly shelved by the latter, and the venture died aborning.

BASF's Oximination Process

BASF has a cyclohexane-to-caprolactam process which it is using in Gemany, and which Dow Badische Chemical Company will employ in its new 44-million-pound Freeport, Tex., installation.

While the economics of current cyclo-based processes look very favorable, there's a good chance that two upcoming photochemical procedures might send the cyclohexane market skyrocketing.

In 1959, the Soviet Union was reported putting up a plant for commercial production of caprolactam via photosynthesis of cyclohexane and nitrosyl chloride in the Armenian chemical complex at Kirovakan (OPD, 6/8/59).

Early this year, Toyo Rayon announced it had solved the cyclohexane-to-caprolactam irradiation route, claiming that material so produced costs less than 50 cents a pound, and is cheaper than toluene-derived capro.

But duPont earlier had been reported as saying it could offer its material at below 50 cents a pound. Commercial Solvents Corporation's economics on its pilot-plant cyclohexane-caprolactam plant are unknown.

One argument against use of a process involving toluene is that while the material may be at a cost advantage now, developing demands for toluene over the near term could well send the price up, virtually eliminating existing price spreads, since at the same time, benzene would likely be declining in price.

Zooming demand for toluene is developing largely because of installation of units at processing plants which dealkylate it to benzene. In turn, production of the latter from toluene is expected to bring it into longer supply, while moving toluene into a snug position.

Whatever happens over the long term, it's a cinch many potential caprolactam producers are taking a close squint at both the duPont and Dow-Badische plants in Texas.

At least four US fiber companies now making, or interested in, nylon-6, could enter the caprolactam manufacturing sweepstakes in the near future. They are:

- American Enka Corporation, which now makes nylon-6.
- Beaunit Mills, Inc., which has been piloting nylon-6.
- Chemstrand Corporation, which could get into nylon-6 if it thinks the economics are right.
- Firestone Tire & Rubber Company, which makes nylon-6 and is now purchasing caprolactam.

In addition, it's not inconceivable that Celanese Corporation of America, with its strong fiber position, could get into nylon-6 as well. Celanese Mexicana SA has been set up in Mexico to make nylon-6, but BASF is slated to supply the caprolactam monomer.

With all the activity in caprolactam, what's likely to happen to its chief competitor and firmly-entrenched opponent, nylon-6/6? Nobody has seen duPont or Chemstrand flinching lately, and both companies believe that their product will remain in a strong competitive position.

It's pointed out that nylon-6/6 still has the lion's share of the tire cord business not held by "Tyrex" rayon yarn. If the switch were entirely to nylon-6/6, business would climb to some 360 million pounds annually and would have the effect of doubling total nylon consumption of 356 million pounds in 1959.

There's little question that a battle between nylon-6/6 and nylon-6 is shaping up as each tries to garner at least a share of the other's markets. In any event, cyclohexane will benefit.

Cyclohexane's Largest Use

The largest current use for cyclo is as the starting point for nylon 6/6. DuPont and Chemstrand use it to make adipic acid, and the latter company uses it also as a starting material for adiponitrile, which in turn goes into hexamethylenediamine.

DuPont, which uses cyclohexane for adipic manufacture, has turned to butadiene as a source material for adiponitrile. It also uses furfural, but will abandon this route in the future.

It's not easy to tell adipic's future (and cyclohexane's) in regard to nylon-6/6. One reason is competition with nylon-6. Another is that should Chemstrand decide to expand its production, would it base adipo output on cyclohexane, as it has in the past, or on butadiene, as does duPont?

Non-nylon uses for adipic acid look somewhat more interesting. Latest figures in from the Tariff Commission show adipic acid ester plasticizer output of 22 million pounds for 1960, up about 8 million pounds from 1959.

Rohm & Haas Company, producer of adipic-based synthetic lubricants, looks like it will be the newest entry in the adipic acid field. The Philadelphia firm has no comment, but it's well known that a plant is expected to be built, perhaps in Louisville, Ky., and perhaps with a capacity of 20 million pounds of adipic acid per year.

Cyclo-Adipic Producers

This would raise the number of cyclohexane-adipic producers to three. DuPont reportedly has adipic capacity in excess of 200 million pounds at Belle, W.Va. and Orange, Tex. Chemstrand can produce close to 200 million pounds annually at Pensacola, Fla. Allied and Monsanto Chemical Company each use phenol as an adipic starting material.

Rohm & Haas, according to trade reports, has negotiated with a cyclohexane producer for its expected requirements for its adipic acid plant.

Rohm & Haas obviously believes in the future of its synthetic lubricant business. Other promising areas for adipic growth include use in polyester urethane rigid foams.

Another attractive growth sector for cyclohexane is as a process solvent in the manufacture of Phillips-type low-pressure polyethylene. It is very hard to get a reading on consumption.

For one thing, Phillips supplies the cyclohexane to its polyethylene-producing customers, and does not want to disclose its business volume. It supplies 85 percent material to PE makers.

For another, the customers themselves are reluctant to talk about what process solvents they are using. For instance, hexane can be used in conjunction with cyclohexane, depending on the type of polyolefin desired.

Polyolefins Plant Cited as Example

One plant with a capacity of 75 million pounds of polyolefins a year is said to be taking from 70,000 gallons to 100,000 gallons of cyclohexane per month, depending on operating rate. But even this proves little.

It's obvious that this business is in the millions-of-gallons bracket at present, and with rising demand for low-pressure polyethylene, cyclohexane will benefit correspondingly.

Other cyclo uses are small in nature. DuPont processes some material into cyclohexanol and cyclohexanone; outsiders estimate production at from 6 million to 8 million pounds of each.

Possible new vistas which could pay off for the "benzene of tomorrow" include a Union Carbide Corporation epoxy resin based on cyclohexanone, and a process for manufacture of phenol from cyclohexane.

Then, too, the Soviets are working on synthesis of cyclohexane homologs with higher volumetric heat of combustion. Destination: supersonic aircraft fuels.

The only real cloud on the horizon of domestic cyclohexane producers at pres-

—Continued on page 45

CYCLOHEXANE USE

	*1960	*1962
Nylon 6/6	72	81
Caprolactam	—	22
Exports	20	21
Other	8	11
Total	100	135

*Millions of gallons.

CYCLOHEXANE'S POTENTIAL RIGHT NOW

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Producer	Location	Capacity* Gals.	Capacity* Lbs.	Disposition
Phillips	Borger, Tex.	30	195	Merchant
Phillips	Sweeny, Tex.	30	195	Merchant
DuPont	Belle, W. Va.	15	98	Captive
DuPont	Orange, Tex.	15	98	Captive
Continental	Ponca City, Okla.	20	130	Merchant
Gulf	Port Arthur, Tex.	20	130	Merchant
	Total	130	846	

*In millions. In addition, it's reported that Gulf could make as much as 5 million gallons a year more in its present facilities; and Continental up to 10 million gallons a year more at Ponca City. Phillips, on stream with a 22-million-gallon benzene unit at Sweeny, is reported boosting cyclohexane capacity as well.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, June 16 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

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Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls. bgs. ton lots, frt. alld. lb. .33½- —
bbls. bgs. smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, comi. or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. 100 lbs 8.25 - —
70%, bbls. 100 lbs 9.95 - —
80% bbls. 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, cms., c.l., dlvd. E 100 lbs. 18.75 - —
tech., dms., c.l., dlvd. E 100 lbs. 13.75 - —
dms., l.c.l., dlvd. E 100 lbs. 15.25 - —
tanks, dlvd. E 100 lbs. 10.00 - —
USP, tanks, dlvd. E 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., dlvd E lb. .16½- —
aluminum ret dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd b lb. .14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib dms., c.l., dlvd lb. 1.35 - —
fib dms., l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. 10½- —
dms., l.c.l., dlvd lb. 12 - —
tanks, dlvd. lb. .08 - —
Acetonitrile, dms., c.l., frt. alld lb. .35½- —
dms., l.c.l., frt. alld lb. .36 - —
tanks, frt. alld lb. .32 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1,000 lbs. frt. alld. lb. 1.22 —
Acetophenone, ens dms lb 42 1.30
Tech., dms., c.l., works ..... lb. .32½- —
dms., l.c.l. works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - —
dms., 100-lb. lots, same basis ... lb. 1.54 - —
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd (60 mesh), 250-lb dms., c.l., pt of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .58¼ —
(Pink and green granulations 5c. per lb higher.)
Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret dms. c.l., frt alld. E of Denver lb. .35½ —
non-ret dms. l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks frt alld E of Denver. lb. .33 —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb. .50 .55
Acrolein, tech., dms., c.l., works lb. 38 - —
dms., l.c.l., works lb. 36¾ - —
tanks, works lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 —
dms., t.t.l., same basis lb. .56 —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., t.t.l., dlvd lb. .43½- —
tanks, dlvd. lb. .40 —
tech., esterification, tanks, frt. alld. lb. .38 —
tech. polymerization, tanks, same basis lb. .38 —
Acrylonitrile, dms., c.l., t.t., frt. equald lb. .26 - —
dms., l.c.l., t.t.l., frt. alld lb. .27 - —
tanks, frt. equald lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 —
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms., 100-lbs or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., t.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb .99 - —
fib. dms., t.c.l. dlvd lb 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c. higher W of Rockies

Allethrin, 90%, dms., frt. alld lb. 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,950 lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs. works. lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd. .. lb. .17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil nat., bitter, f.p.a., bots. lb. 2.73 3.45
NF, bots. ..... lb. 3.60 - 3.30
sweet, USP, cns., dms. ..... lb. .60 - .70
Aloe, Cape, cs. ..... lb. 35 - .40
powd cs ..... lb 60 - .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
		equald.	equalized	pf.	proof
approx.	approximately	exp.	expressed	phos.	phosphate
artif	artificial	Ext.	external	photo.	photographic
ASTM	American Society for Testing Materials	F	fahrenheit	pkgs.	packages
		ferment.	fermentation	powd.	powdered
Atl.	Atlantic	f.f.a.	free fatty acid	precip.	precipitated
Be.	Baume	f.f.c.	free from chlorine	prod.	producer
bbls.	barrels	fib.	fiber	pt	point
bgs.	bags	f.o.b.	free on board	pulv.	pulverized
bls.	bales	f.p.a.	free of prussic acid	purif.	purified
bots.	bottles	frt.	freight	redist.	redistilled
b.p.	boiling point	gal.	gallon	refd.	refined
b.p.l.	bone phosphate of lime	gran.	granular	refy.	refinery
		grd.	ground	reg.	regular.
b.r.	boiling range	i.&a.	iron and aluminum	resub.	resublimed
bxs.	boxes	i.b.p.	initial boiling point	ret.	returnable
C	centigrade	imp.	imported	SD	specially denatured
cbys.	carboys	incl.	included	s.d.	single distilled
CD	completely denatured	indust.	industrial	S E.	southeast
		kgs.	kegs	sec.	secondary
c.i.f.	cost, insurance, freight	l-	laevo	secs	seconds
		lacq.	lacquer	s.g.	specific gravity
cks.	casks	lb.	pound	shipt.	shipment
c.l.	carlots	l.c.l.	less carlots	soln.	solution
cns.	cans	l.t.l.	less truckload	s.u.	standard unit
coml.	commercial	liq.	liquid	syn.	synthetic
conc.	concentrated	mfrs.	manufacturers	tanks.	railroad tankcars
CP	chemically pure	m-	meta	tech.	technical
cps.	centipoises	m.a.p.	mixed aniline point	tert-	tertiary
cryst.	crystalline	min.	minimum	t.l.	truckloads
cs	cases	m.p.	melting point	t.w.	tankwagons
ctns.	cartons	N-	nitrogen	USP	U. S. Pharmacopoeia
cyls.	cylinders	n-	normal		
d-	dextro	nat.	natural	vis.	viscosity
dbl.	double	neut	neutral	VM&P	varnish makers & painters
denat.	denatured	NF	National Formulary		
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	W.	west
				whse.	warehouse
dl-	dextro-laevo			w.w.	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

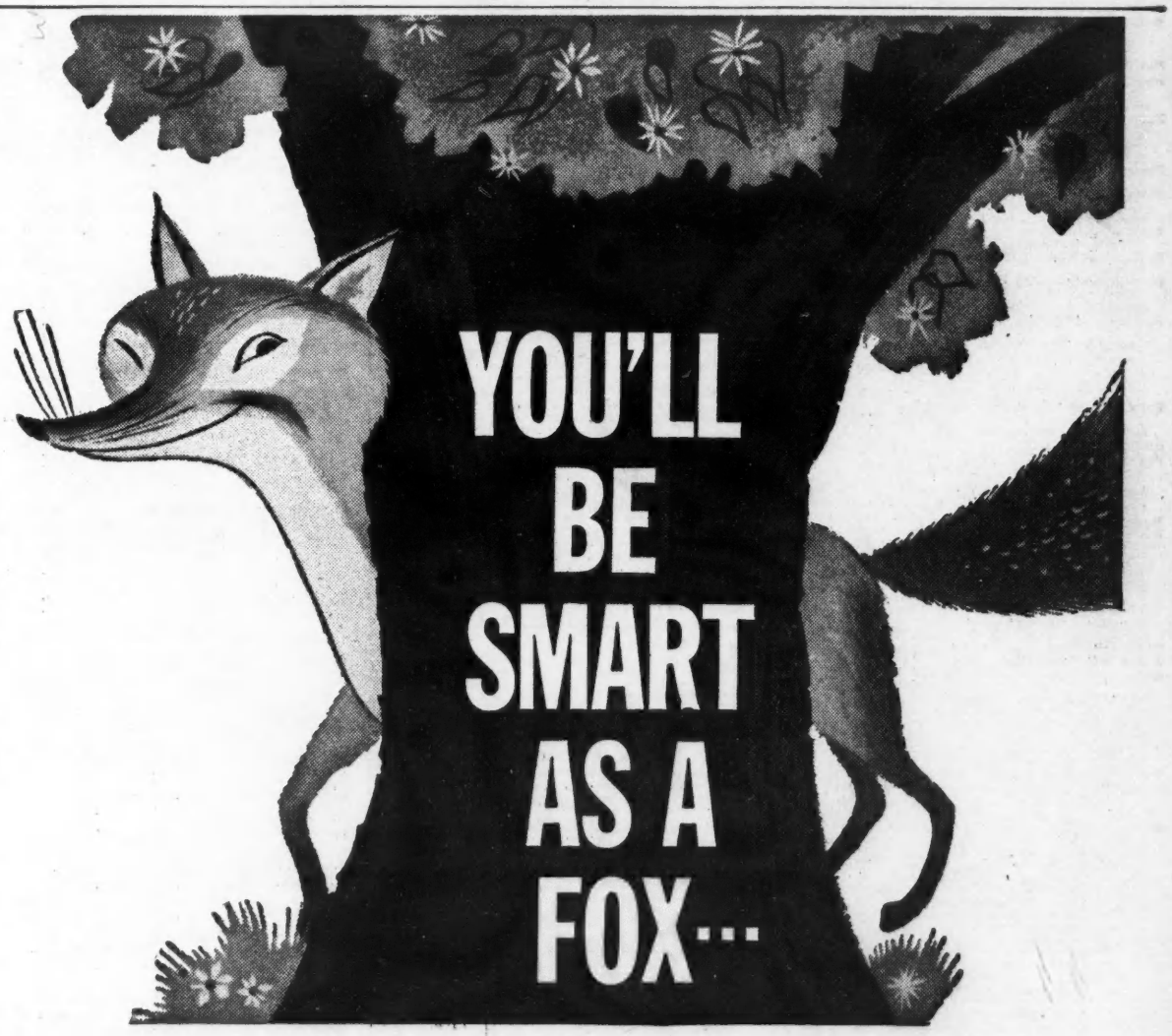
Aloin, USP, bbls., dms., kgs ..... lb. 2.85 - 2.70
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs. 5.05 - —
Powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works ..... 100 lbs. 5.30 - —
Powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 —
Alumina, calcined, bgs., c.l., works. lb. .0535- —
bgs., l.c.l., works ..... lb. .056 - .0635
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works lb. .16½- —
cryst., dms., c.l. works 100 lbs. 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
Soln., 32° cbys., c.l., works lb. .0495- —
cbys., l.c.l., works lb. .0570- .1095
tanks, works 100 lbs. 3.95 - —
NF, gran., dms., works lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l. basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l., works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Light, bgs., c.l., t.l., works ..... lb. .09½- —
bgs., t.l., to c.l., works ..... lb. .10½- —
bgs., l.t.l., works ..... lb. .11½- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb. lots, frt. alld lb. .3810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton 41.00 - —
bulk, c.l., same basis ton 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., t.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., t.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms. smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton. 92.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton. 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies ton. 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 —
bgs. l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton 325 - —
dms., ton lots, ex whse. 100 lbs. 22.88 - —
dms., smaller lots, ex whse 100 lbs. 24.11 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works ..... 100 lbs. 9.50 - —

Ammonium bichromate, dms., works lb. .48 - .53
Ammonium bifluoride, dms., dlvd lb. .2145 - .2345
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works, 100 lbs. 6.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - 8.45
USP, gran., 250-lb. dm lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.51 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., t.t.l., frt. alld lb .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., t.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works. lb. 1.22 - —
400-lb dms. 2,000-lb contracts, works lb. 1.23 - —
400-lb dms. works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade 33.5% N, bgs. f.o.b works ton.67.00 - —
dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point frt. equald to $3 ton base price ton.70.00 - —
Ammonium oxalate, tech., fine gran., 250-lb dm., f.o.b works E lb. .28½- —
Tech. powd. 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.15.27 - —
bgs., smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate powder $1c per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, com., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech. bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¾
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., t.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk f.o.b works, base price ton.32.00 - —
Purif., c.l., 100-lb. bgs., f.o.b. works lb. .08¼- —
Large granular, bulk, c.l., works ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., t.c.l., t.l.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald., 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., t.c.l., works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, com., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld. E of Rockies lb. .18½- .19
dms., t.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., t.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
Tech., dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., c.l. dlvd. lb. .20½- —
tanks, dlvd lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., t.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., t.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., t.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Primary, dms., c.l., frt. alld lb. .20¼- —
dms., t.c.l., frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., t.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., t.c.l., frt. alld. E lb. .18½- —
tanks, frt. alld E lb. .14½- —
1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.30
p-tert Amyl phenol, dms., c.l., works. lb. .28 - —
dms., t.c.l., works lb. .29 - —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms lb. 1.50 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls lb. .50 - 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .20 - —
dms., t.c.l. frt. alld. lb. .21 - —
tanks, frt alld lb. .18 - —
Aniline oil (see Aniline).

Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .23 - —
dms., t.c.l., same basis lb. .25 - —
Anise oil, USP, dms lb. 1.90 - 2.00
Anise seed, Turkish, bgs lb. .24 - —
Spanish, bgs. lb. .32 - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., t.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., t.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb 1.15 - —
Anthraquinone, 99.5%, bgs., c.l., frt. alld lb. .70 - —
bbls., t.c.l., same basis lb. .73 - —
Electrical grade, bgs., t.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½- —
cs., c.l., mines lb. .33 - —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- .30
bgs., t.c.l., frt. alld. lb. .28 - .31½
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, t.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —

Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls lb. .18 - .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine free base, dms., 10-kilo 5-kilo lots or more kilo.60.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 - —
l-Arginine monohydrochloride, dms., 5-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., t.c.l., works lb. .06½- .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .35 - .40
Powd., bbls., dms lb. .75 - .80

Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian, crude
6D, c.l (30 tons), mines ton.80 00 - —
7D, c.l (30 tons), mines ton 75 00 - —
7F, c.l (30 tons), mines ton 71 00 - —
7H, c.l (30 tons) mines ton 61 00 - —
7K, c.l (30 tons) mines ton.50 00 - —
7M, c.l (30 tons) mines ton 44 00 - —
7R, c.l. (30 tons) mines ton 43 00 - —
7RF c.l (30 tons) mines ton 44 00 - —
7T, c.l, (30 tons), mines ton 41 00 - —
7TF c.l (30 tons) mines ton 44 00 - —
Asbestos prices are in Canadian funds; l.c.l lots $4 per ton higher
Ascorbic acid, USP dms. 100-kilos kilo. 6.35 - —
dms., less than 100-kilos kilo. 6.00 - —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F fusing pt., bgs., c.l., mines ton.43.00 - —
Petroleum, cut-back, tanks, tankwagon, refy. gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).



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Atropine, NF, tins	oz.	Nom.	
Atropine sulfate, USP, bots, 10 oz. lots	oz.	5.25	—
Azelaic acid, bgs., c.l., dlvd.	lb.	.40	—
bgs., ton lots, same basis	lb.	.41	—

B

Bacitracin, sterile, over 500,000,000 units, 50,000 units		.90	—
non-sterile, over 500,000,000 units, 50,000 units		.65	—
Balm of Gilead buds, dried, bgs	lb.	1.25	1.35
Barberry root bark, bgs	lb	1.00	1.10
Barbital, NF, 100-lb dms., f.o.b. works	lb.	4.50	—
Barbital sodium, NF, 100-lb dms.	lb.	4.75	—
Barium carbonate precip., bgs., c.l., works	ton.	111.50	—
bgs., smaller lots, works	ton.	126.50	—
Barium chlorate, dms., works	lb.	.32	.41
Barium chloride anhyd., bgs., c.l., works	ton.	176.00	—
bgs., t.c.l., works	ton.	196.00	—
NF, cryst., dms., 400-lbs., works	lb.	23	—
Tech., cryst., bgs., c.l., works, 100 lbs		7.00	—
bgs., t.c.l., works 100 lbs		8.00	—
Barium chromate, bgs., frt. equald.	lb.	.38	—
Barium dioxide (see Barium peroxide).			
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald	ton.	208.00	—
bgs., t.c.l., t.l. frt equald	ton.	218.00	—
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.		11.25	—
bgs. t.c.l., frt. equald 100 lbs.		11.75	—
Barium monoxide (see Barium oxide).			
Barium nitrate bbls. c.l., t.l. dlvd	lb.	.16	—
bbls. t.c.l. t.l.. dlvd	lb	17	—
Barium oxide, grd., dms., c.l., t.l., frt equald	ton.	275.00	—
dms. t.c.l., t.l., frt equald	ton.	285.00	—
Barium peroxide, dms. frt equald.	lb	.20	—
Barium stearate ctns. c.l. frt alld.	lb	.41	—
ctns. t.c.l. same basis	lb.	.42	.46
Barium sulfate, tech (see Barytes and blanc fixe)			
Barium sulfate, X-ray, 100-lb dm.	lb.	.19	—
Barium sulfide, dms., c.l. works	ton.	100.00	—
dms., t.c.l. works	ton.	110.00	—
Barytes, southern off-color, bgs. mines	ton.	30.00	—
95-75% bgs., mines	ton.	30.00	—
white, water-grd., paper bgs., c.l. St. Louis	ton.	60.00	60.25
paper bgs., ex whse, New York	ton.	84.85	—
Battery acid, chys., c.l., works, 100 lbs		2.35	—
chys, t.c.l., works, E 100 lbs		2.65	10.95
Bauxite, bulk, mines	ton	7.00	10.00
Bay oil, NF, Puerto Rican, 50-55% cns	lb.	4.00	—
55-60%, cns.	lb.	4.00	—
NF, West Indian, 50-55%, cns. dms	lb.	4.25	4.50
Bayberry wax, bgs	lb.	.65	.70
Beeswax, crude, African, bgs.	lb.	.52	.54
Brazilian, bgs.	lb.	.56	.57
Central American, bgs	lb.	.56	.57
Chilean, bgs.	lb.	.57	Nom.
Refd. USP bleached white, bricks 100-lb ctns	lb.	.67	.69
white, slabs, 100-lb ctns	lb.	.66	.68
yellow, bricks 100-lb ctns	lb	59	61
yellow, slabs, 100-lb ctns	lb	58	60
Belladonna leaf, bls	lb	.24	.26
Belladonna root, bls	lb.	.35	.38
Bentonite, dom. 200 mesh, bgs. c.l., mines	ton.	14.00	—
imp. Italian, white, high gel., bgs., 5-ton lots ex whse	ton.	95.20	—
bgs., 1-ton lots, ex whse	ton.	99.00	—
Imp. Italian, white, low gel. bgs., 5-ton lots, ex whse	ton.	93.40	—
bgs., 1-ton lots ex whse	ton.	97.16	—
Benzal chloride chys. works	lb.	.44	—
Benzaldehyde, NF, dms	lb.	.74	—
Tech., dms., c.l., t.l.	lb.	.42	—
dms., t.c.l.	lb.	.44	—
Benzene, pure or nitration, tanks, works:			
Baton Rouge, La	gal.	.34	—
Bethlehem, Pa	gal.	.34	—
Birmingham district	gal.	.34	—
Chicago district	gal.	.34	—
Cleveland district	gal.	.34	—
Geneva, Utah	gal.	.34	—
Houston, Tex.	gal.	.34	—
Johnstown, Pa	gal.	.34	—
Lorain, Ohio	gal.	.34	—
Middletown, Ohio	gal.	.34	—
Mennequa, Colo.	gal.	.34	—
Philadelphia district	gal.	.34	—
Pittsburgh district	gal.	.34	—
Port Arthur, Tex.	gal.	.34	—
St. Louis, Mo. District	gal.	.34	—
[illegible]			
Syracuse, N. Y.	gal.	.34	—
Terre Haute, Ind	gal	.34	—
Youngstown, Ohio	gal.	.34	—
Lackawanna, N. Y.	gal	.34	—
Lone Star, Tex	gal.	.34	—
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).			
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l. consignment, dlvd. gamma-unit		.0075	—
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit		.0065	—
Tech. low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit		.0075	—
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit		.0056	—
Benzidine hydrochloride, bbls., c.l., frt. alld. 100% basis	lb	1.19	—
bbls., t.c.l., same basis	lb	1.21	—
Benzidine sulfate, tech., bbls., frt. alld., 100% basis	lb	1.21	—
Benzidine yellow, AAA, bbls., dlvd.	lb.	2.20	—
AAOT, bbls., dlvd.	lb	2.55	—
Lightfast, bbls., dlvd.	lb	3.40	—
Benzocaine, dms., 100-lbs., frt alld.	lb.	3.25	—
Benzoic acid, tech., dms., c.l., t.l., frt. alld	lb	.25	.37
dms., t.t.l., same basis	lb.	.29	.41
tanks, same basis	lb.	.21	—
USP, bbls., dms., ton lots	lb.	.48	—
bbls., dms., 1,000-lb lots	lb.	.50	—

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra	lb.	.32	—
Benzophenone, dms	lb	1.35	1.45
Benzotriazole, tech, dms, 1,000-lb lots, works	lb.	1.95	—
Benzotrichloride, chys., 1,000-lb lots or more, frt. equald.	lb.	.21	—
chys., smaller lots, frt. equald	lb.	.23	—
Benzoyl chloride, chys., dms., c.l., works, frt. equald	lb.	.22	—
chys., t.c.l., same basis	lb	.23	—
tanktrucks, dlvd Metropolitan area	lb.	.21	—
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works	lb.	.98	1.08
Benzyl acetate, f.f.e., cns., dms	lb.	.54	—
Benzyl alcohol, NF, dms.	lb.	.54	—
Tech., dms., dlvd	lb.	.47½	.65
Benzyl benzoate, USP, 40-lb. dms.	lb.	.62	—
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald	lb.	.23	—
dms., t.c.l., same basis	lb	.24	—
tanktrucks, dlvd., Metropolitan area	lb.	.21	—
Benzyl cinnamate, cns	lb.	3.80	4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld	lb.	1.25	—
12-49 dms. same basis	lb.	1.35	—
1-11 dms., same basis	lb.	1.90	—
Benzyl formate, cns.	lb.	1.70	1.85
Benzyl isoeugenol, cns	lb	8.20	8.30
Benzyl propionate, bots	lb.	1.30	1.35
Benzyl salicylate, bots	lb.	1.50	1.85
Benzylidine acetone, bots	lb.	1.65	1.75
Benzylidine chloride (see Benzal chloride).			
Berberine bisulfate, cns	lb	56.50	—
Berberine hydrochloride, bots	lb	56.50	—
Bergamot oil, nat., NF, Italian, cns.	lb.	11.00	12.00
Betagammapicoline (see b,g-Picoline).			
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid)			
Betamethylnaphthalene (see Methylnaphthalene)			
Betanaphthol (see b-Naphthol)			
Betanaphthylamine (see b-Naphthylamine)			
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).			
Betaphenylethylamine (see b-Phenylethylamine)			
BHT (see Benzene hexachloride tech.).			
Biotin cryst. bots	gram	10.00	—
Biphenyl (see Diphenyl)			
Birchtar oil crude cns	lb	1.50	1.90
Rectified cns	lb	1.75	2.00
Bismuth chloride tars	lb	5.11	—
Bismuth hydroxide dms	lb	4.60	4.85
Bismuth metal, hxs ton lots	lb	2.25	—
Bismuth nitrate, cryst., 200-lb. dm.	lb.	2.25	—
Bismuth oxychloride, 25-lb. dm., f.o.b. works	lb.	4.82	—
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works	lb.	3.70	—
Bismuth subgallate NF 200-lb dm. f.o.b works	lb	3.98	—
Bismuth subiodide fib dms	lb	5.37	—
Bismuth subnitrate NF 200-lb dm. f.o.b., works	lb.	3.10	—
Bismuth subsalicylate USP 100-lb dm., f.o.b works	lb	4.15	—
Bismuth trioxide 100-lb dms. f.o.b works	lb.	4.40	—
Bismuth-ammonium citrate, USP, powd., jars	lb	4.22	—
Bisphenol-A bgs., c.l., t.l., single shipt. 70,000-lbs or more, frt. alld	lb.	.30½	—
bgs., c.l., t.l., less than 70,000-lbs., same basis	lb.	.31	—
bgs. t.c.l., same basis	lb.	.32½	—
Blackberry root bark, bls	lb.	.50	.55

BLACK PIGMENTS

Black pigment quotations are listed individually For example, prices on Black, acetylene, may be found in the A's under Acetylene black

Blanc fixe direct process, bgs. c.l., works	ton	180.00	—
bgs., t.c.l. works	ton.	170.00	—
bgs., t.c.l., New York whse	ton.	215.00	—
Blood dried 16-16½% ammonia, bgs., New York unit	ton	5.50	—
Bloodroot, bls	lb	.85	.90

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue

Blue dyes (see Dyes)			
Blue vitriol (see Copper sulfate)			
Bois de rose oil, Brazilian, dms	lb	2.05	—
Peruvian dms.	lb	1.65	—
BON acid maroons, pure, bbls	lb	1.75	—
Resinated bbls	lb	1.50	—
Bone black, dms. c.l., frt. alld	lb.	.1750	.2225
l.c.l. works	lb.	.1950	.2425
Pacific coast bone black prices 3¼c. per lb higher			
Bonemeal, steamed, works, E	ton.	100.00	—
Bone phosphate defluorinated (see Defluorinated phosphate).			
Bone phosphate, precip (see Calcium phosphate tribasic)			
Borax, tech anhyd., 99½%, bgs., c.l. works	ton	92.00	—
bgs. ton lots, ex whse, New York or Chicago 100 lbs.		7.67	—
Tech., anhyd., 99½%, bgs., smaller lots, same basis 100 lbs.		8.91	10.91
bulk c.l., works	ton	83.00	—
Tech., gran., decanydrate, 99½%, bgs., c.l., works	ton.	50.00	—
bgs. ton lots ex whse, New York or Chicago 100 lbs.		5.31	—
bgs smaller lots same basis 100 lbs.		6.56	8.56
bulk c.l., works	ton	43.50	—
Tech., pentahydrate, 99½%, bgs., c.l., works	ton.	64.50	—
bgs ton lots, ex whse, New York or Chicago 100 lbs.		6.12	—
bgs smaller lots same basis 100 lbs.		7.37	9.37
bulk, c.l., works	ton	58.00	—
USP powd., bgs. c.l., works	ton	54.00	—
bgs., ton lots, ex whse, New York or Chicago 100 lbs.		6.57	—
bgs., smaller lots, same basis 100 lbs.		7.82	9.82
Bordeaux powder tribasic bgs. c.l., dlvd	lb.	24	—
bgs. t.c.l., same basis	lb	26	—
Boric acid tech. anhyd 99.9% bgs., c.l. works	ton.	335.00	—
bgs ton lots, ex whse, New York or Chicago 100 lbs.		21.27	—
bgs. smaller lots same basis 100 lbs.		22.53	24.53
cryst. 99.9% bgs. c.l. works	ton.	163.50	—
bgs. ton lots, ex whse, New York or Chicago 100 lbs.		11.67	—
bgs. smaller lots, same basis 100 lbs.		12.92	14.92
dms. c.l., works	ton	186.50	—
dms., ton lots, ex whse., New York or Chicago 100 lbs.		13.17	—
dms., smaller lots, same basis 100 lbs.		14.43	—
Boric acid, tech., gran., 99.9%, bgs., c.l., works	ton.	112.00	—
bgs., ton lots ex whse., New York or Chicago 100 lbs.		8.78	—
bgs., smaller lots, same basis 100 lbs.		10.03	12.03
dms., c.l., works	ton.	137.00	—
dms., ton lots, ex whse., New York or Chicago 100 lbs.		10.29	—
dms. smaller lots same basis 100 lbs.		11.54	—
bulk, c.l., works	ton.	106.00	—
powd., bgs., ton lots, ex whse., New York or Chicago 100 lbs.		9.20	—
bgs., smaller lots, same basis 100 lbs.		10.45	12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs.		10.71	—
dms., smaller lots, same basis 100 lbs.		11.96	—
USP boric acid $25 per ton higher in bags.			
Borneol, cns.	lb.	2.75	—
Boron trichloride CP 1,800-lb. cyls., works	lb.	1.25	—
100-lb. cyls. works	lb.	1.70	—
Boron trifluoride, gas, cyls., t.l., works	lb.	.70	—
cyls., t.t.l. works	lb.	.70	—
Brimstone (see Sulfur).			
Broenner's acid, bbls	lb.	1.53	—
Bromine, purif., cs. c.l., t.l., dlvd. E of Rockies	lb.	.32	—
cs. t.c.l., same basis	lb.	.34	.39
ret. dms., c.l., t.l., dlvd. E. of Rockies	lb.	.31	—
ret. dms., t.c.l., same basis	lb.	.31	.34
tanks, same basis	lb.	.21½	—
Bromochloromethane dms., c.l., frt. equald	lb.	.48	—
dms., t.c.l., same basis	lb.	.50	—
tanks, same basis	lb.	.47	—
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald	lb.	1.93	—
Bromstyrol, bots	lb.	5.25	5.35
Brucine, cns.	oz.	1.10	—
Brucine sulfate, NF, cns.	oz.	.85	—
Buchu leaves, bbls.	lb.	.60	.65

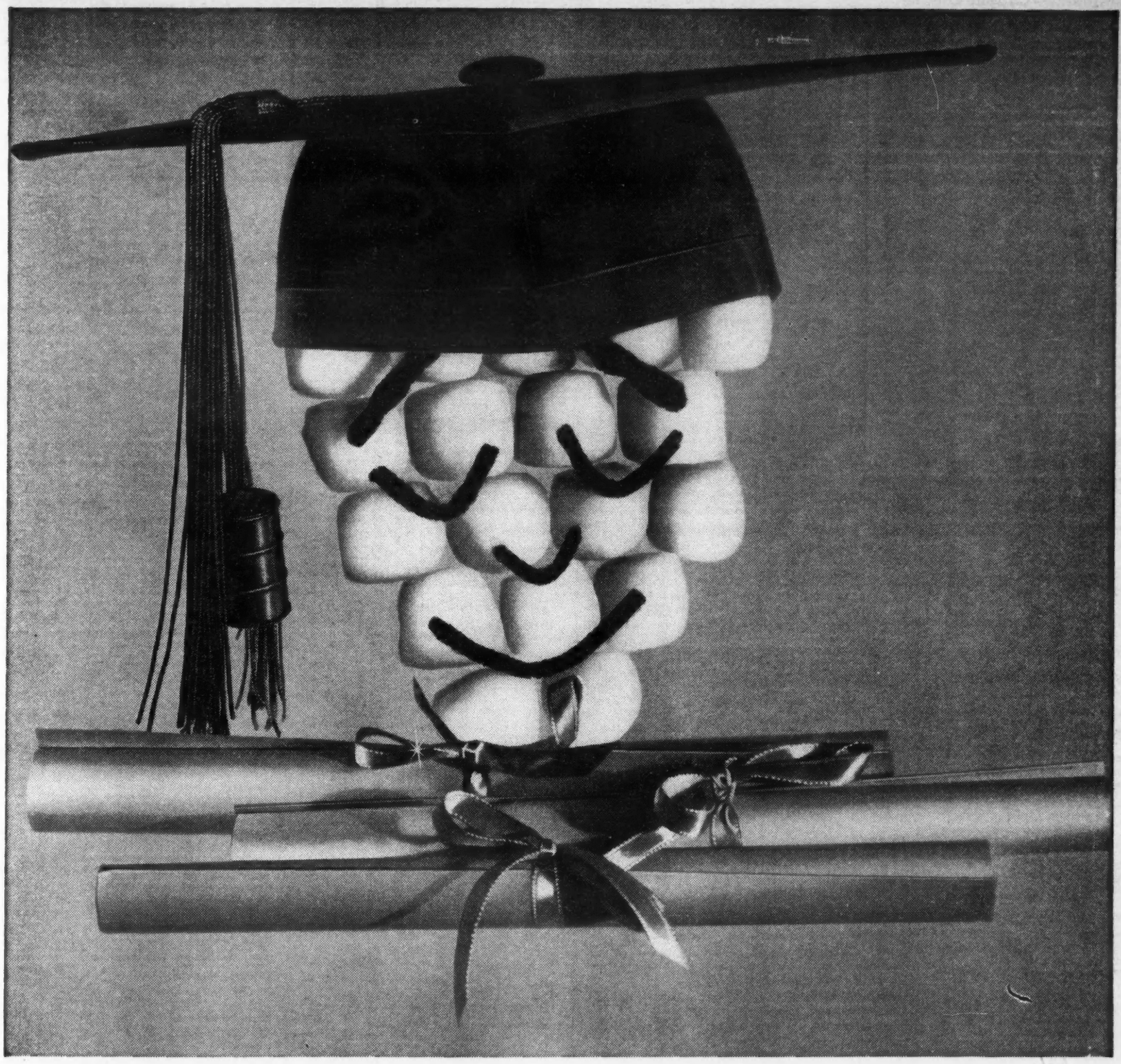
BROWN PIGMENTS

Brown pigment quotations are listed individually For example, prices on Brown, Iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd cyls., c.l., refy	lb.	.21	—
cyls., t.c.l., refy	lb.	.22	—
tanks, dlvd	lb.	.12¾	—
Butene-1, tanks, works	lb.	.0625	—
Butene-2, tanks, works	lb.	.0570	—
n-Butyl acetate, ferment, dms., c.l., frt. alld	lb.	.17	—
dms., t.c.l., same basis	lb.	.18½	—
tanks, same basis	lb.	.14½	—
Syn., dms., c.l., dlvd. E	lb.	.17	—
dms., t.c.l., same basis	lb.	.18½	—
tanks, same basis	lb.	.14½	—
sec-Butyl acetate, syn, dms., c.l., dlvd. E	lb.	.14¾	—
dms., t.c.l., same basis	lb.	.16¼	—
tanks, same basis	lb.	.12¼	—
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E	lb.	.37½	—
dms., t.t.l., same basis	lb.	.38½	—
tanks, same basis	lb.	.35	—
n-Butyl alcohol, ferment, dms., c.l., frt. alld	lb.	.18	—
dms., t.c.l. frt. alld	lb.	.19½	—
tanks, frt. alld	lb.	.15½	—
Syn., dms., c.l., dlvd. E	lb.	.17	—
dms., t.c.l., frt. alld	lb.	.19½	—
tanks, frt. alld	lb.	.15½	—
Sec-synthetic, dms., c.l., dlvd	lb.	.15	—
dms., t.c.l., dlvd.	lb.	.16½	—
tanks, dlvd	lb.	.12½	—
Tert-synthetic, dms., c.l., frt. alld., dlvd. E	lb.	.16	—
dms., t.c.l., same basis	lb.	.17½	—
tanks, same basis	lb.	.13½	—
Butyl aldehyde (see Butyraldehyde).			
Butyl chloride, dms., c.l., works	lb.	.37½	—
dms., t.c.l., works	lb.	.38¼	—
n-Butyl ether, dms., c.l., works	lb.	.35¼	—
dms., t.c.l., works	lb.	.36	—
tanks, works	lb.	.33¼	—
Butyl lactate, dms. c.l. frt. alld. E. Rockies	lb.	.42½	—
dms., t.c.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.40	—
Butyl laurate, dms., works	lb.	.37½	—
Butyl methacrylate, dms., c.l., t.l., works	lb.	.55	—
dms, t.c.l., works	lb.	.55½	—
Butyl oleate, refd., dms., t.c.l., works	lb.	.32	—
Butyl phenylacetate, dms	lb.	4.50	4.60
Butyl phthalate (see Dibutyl phthalate).			
Butyl stearate, CP, dms., t.c.l., frt. alld, E. of Rockies	lb.	.27¼	.28½
tech., dms., c.l., same basis	lb.	.25¾	—
Butylamine (see Mono- Di- and Tri-butylamine).			
tert-Butylamine, dms. c.l., t.l., t.o.b. works	lb.	.47	—
dms., t.c.l., same basis	lb.	.47½	—
tc., t.t.l., same basis	lb.	.45	—
Butylated hydroxyanisole, food grade dms. dlvd.	lb	4.75	—
6-tert-Butyl m cresol (see Mono-tert-butyl m cresol)			
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p cresol)			
1,3 Butylene glycol, dms. c.l., t.l., dlvd	lb.	.20½	—
dms., t.c.l., t.t.l., f.o.b. works	lb.	.22	—
tanks dlvd	lb.	.18	—
p-tert-Butylphenol, bgs., c.l., frt. alld	lb.	.25½	—
bgs., t.c.l., same basis	lb.	.26½	—
tanks, same basis	lb.	.23½	—
Butyraldehyde, dms., c.l., dlvd	lb.	.22	—
dms t.c.l., dlvd.	lb.	.23½	—
tanks dlvd	lb.	.19½	—
Butyric acid, 99%, dms., c.l., frt. equald	lb.	.34	—
dms., t.c.l., same basis	lb.	.34½	—
tanks, same basis	lb.	.32½	—
Butyric ether (see Ethyl butyrate).			
Butyrolactone, dms., c.l. t.l., works.	lb.	.40	—
dms. t.c.l., same basis	lb.	.43	—
n-Butyronitrile, dms., c.l., dlvd	lb.	.56½	—
dms., t.c.l., dlvd.	lb.	.57½	—
tanks, dlvd.	lb.	.54	—

C

Cacao butter (see Cocoa butter).			
Cadmium CP red, dark shade, bbls., frt alld E of Rockies	lb	5.55	—
Light shade, bbls same basis	lb	4.65	—
Medium shade, bbls., same basis.	lb.	5.30	—
Medium, light shade, bbls., same basis,	lb.	4.90	—
Orange-red shade, bbls same basis	lb.	4.30	—
Yellow, all shades, bbls, frt alld. E. of Rockies	lb.	3.02	—
Cadmium chloride, 400-lb dms., f.o.b. shipping point	lb.	1.56½	—
Cadmium iodide, 25-lb fib dms	lb	6.75	7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd	lb.	1.60	—
Cadmium nitrate, purif. cryst., 400-lb. dms., less than 5,000 lbs., f.o.b. shipping point.	lb.	.94	—
400-lb. dms., 5,000 lbs. or more, same basis	lb.	.90	—
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies	lb.	1.73	—
Cadmium-mercury lithopone red, dark shade, bbls same Basis	lb.	2.03	—
Red, light shade bbls., same basis	lb.	1.80	—
Red, medium shade, bbls. same basis	lb.	1.95	—
Red, medium light shade bbls. same basis	lb.	1.88	—
Red, maroon shade, bbls same basis	lb.	2.11	—
Cadmium-selenide lithopone maroon, bbls., frt alld E of Rockies	lb.	2.84	—
Orange, bbls., same basis	lb.	1.66	—
Cadmium-selenide lithopone red, orange-red shade bbls. same basis	lb.	1.80	—
Red, dark shade, bbls. same basis	lb.	2.64	—
Red, light shade, bbls., same basis	lb.	1.96	—
Red, medium shade, bbls. same basis	lb.	2.31	—
Red, medium-light shade bbls same basis	lb.	2.08	—
Cadmium-selenide, lithopone, yellow, all shades bbls frt alld E. of Rockies	lb.	1.27	—
Caffeine NF citrated dms 100-lb lots or more	lb	2.70	—
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld	lb.	2.25	—
hydrous, powd., 150-lb. dms., frt. alld	lb.	2.25	—
USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld.	lb.	2.40	—
Cajuput oil, native, cns.	lb	1.75	2.00
Redist. USP cns	lb	1.90	2.10
Calamine USP dms.	lb.	.34	—
Calamus oil bots	lb.	12.00	20.00
Calciferol, cryst., 10-kilo or more lots, works	gram	.54	—
1-10 kilo lots	gram	.55	—
Calciferol in edible oil (see Viosterol).			
Calcium p-aminosalicylate trihydrate fib dms., 100 lbs. or more frt. adjusted	lb	3.10	—
Calcium bromide, NF jars, 100 lbs. or more	lb.	1.10	—
Calcium carbide, standard generator size, 600-lb dms. c.l., dlvd	ton.	149.00	—
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l. works	ton.	10.50	—
Chalk, whiting, 325 mesh, bgs., c.l., works	ton.	32.00	34.00
water-grd. ½ to 10 microns bgs., c.l., works	ton.	30.00	—
10 to 20 microns, bgs., c.l., works	ton.	17.00	18.00
Precip., dense, bgs., c.l., works.	ton.	30.00	38.50
bgs. t.c.l., works	ton.	45.00	53.50
medium bgs. c.l., works	ton.	38.00	—
bgs. t.c.l works	ton.	48.00	53.00
Surface treated, bgs., c.l., works.	ton.	42.00	44.00
bgs., t.c.l., works	ton.	57.00	59.00
ultrafine, bgs. c.l., works.	ton.	117.50	167.50
bgs t.c.l. works	ton.	137.50	187.50
Calcium chloride conc. flake or pellet 94-97%, paper bgs., c.l works frt equald	ton.	39.30	—
Flake, 77-80%, paper bgs., c.l., works, frt. equald	ton.	32.00	—
Liquor, 40% tanks frt equald	ton.	12.50	—
Powd., 77% min., paper bgs., c.l., works, frt. equald	ton.	38.00	—
Purif., gran. dms	lb	.27	—
Solid, 73-75%, dms., c.l., frt. equald	ton.	30.50	—
dms. t.c.l. works frt. equald	ton.	36.00	73.00
USP gran. dms.	lb	.32	—
Calcium chromate, bgs., dlvd	lb.	.37	—
Calcium cyclamate, 100-lb dms	lb.	1.95	—
Calcium gluconate, USP, AA grade, 100-lb dm., ton	lb.	.73½	—
USP powd 100-lb dm. ton	lb.	.66½	—
Calcium hydride lump, dms. works,	lb	2.20	3.00
Calcium hypochlorite, high test, gran. 45-lb cs., dlvd E of Rockies	cs.	27.50	—
100-lb. dms., same basis	dm.	39.50	—
Calcium hypophosphite, dms. 1,000-lb lots	lb	1.28	—
Calcium iodide, 25-lb. jars, works	lb.	4.27	—
Calcium lactate NF, dms., f.o.b. works	lb.	.43	.46
Calcium mandelate USP, 150-lb. dm., works	lb.	3.25	—
Calcium naphthenate, liq. 4% Ca., dms. frt equald	lb.	.30	—
Calcium pantothenate, USP, jars, 1 kilo or more	kilo.	35.00	—
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).			
Calcium phenosulfonate, dms	lb	1.24	1.25
Calcium phosphate, dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs.		8.25	—
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l. t.l., Bonnie, Fla., frt. equald	ton.	81.00	—
bgs. c.l., t.l., f.o.b. Texas City works	ton.	75.50	—
bgs., l.c.l.	ton.	91.00	—
Feed grade, 21% P., bgs., c.l., t.l., frt. equald	ton.	97.65	—
bgs. t.c.l. frt equald	ton	107.65	—
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l. prices			
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs.		7.45	—
bgs., smaller lots, same basis, 100 lbs.		7.95	—
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs.		9.25	—
bgs. t.c.l., frt. equald 100 lbs.		10.00	—
Calcium propionate, any quantity, dms., dlvd E. of Rockies.	lb.	.37	—
Prices W of Rockies 3c. per lb more.			
Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N Y	lb.	.39	—
Calcium resinate, precip., dms., frt. alld., works	lb.	.45	—
Calcium silicate hydrated, bgs., c.l., works	lb.	.08	—
bgs., t.c.l., works	lb.	.06½	—
Calcium silicate paint grade (see Wollastonite).			
Calcium stearate, ctns., c.l.	lb.	.39	—
ctns., t.c.l.	lb.	.40	.44
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works	lb	4.32	—
NF, mild, precip., dms., 100-lbs., f.o.b. works	lb.	5.67	—



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CHEMICAL DIVISION
342 MADISON AVE., NEW YORK 17, N. Y.

FINE HEYDEN CHEMICALS

HEYDEN NEWPORT CHEMICAL CORPORATION

Camphene 46° m.p. dms incl., c.l., works lb. .15 —
dms incl., t.c.l. same basis lb. .16½- —
tanks same basis lb. .12½- —
Camphene chlorinated 67-69% (see Toxaphene)
Camphor monobromated NF dms., kgs lb 3.63 3.70
Camphor syn. tech. 1 bbl or more, lb. .45 - —
USP gran. powd. bbls., 1,000-lb lots lb .53 - —
bbls smaller lots lb. .54 - —
tablets, ctns., 1,000-lb lots, lb .80 - —
ctns. 500-lb. lots lb .81 - —
ctns., smaller lots lb .83 - —
Camphor oil, sassafrassy dms. lb .35 .55
White dms lb .20 .50
Cananga oil native, cns. lb 5.00 6.50
Rectified, cns lb 7.25 10.00
Candelilla wax, crude, bgs lb .57 - .59
Refd., pure, bgs lb .63 - .63
Powdered Candelilla wax 20 to 100 mesh 8c higher
Cantharides, Chinese, cs. lb 1.00 —
powd. bgs lb 1.15 —
Russian bgs. lb 2.00 2.15
powd. bgs. lb 2.15 2.30
Capric acid, dms lb. .27¼- .29¼
tanks lb. .24¼- —
Caprolactam monomer, bgs., c.l., t.l. f.o.b works lb .52 - —
bgs. t.c.l., t.l.l. same basis lb .57 - —
tanks same basis lb .49 - —
Caprylic alcohol 85% dms. c.l., t.l., works lb .19 —
dms., t.c.l. same basis lb. .19½- —
tanks, frt equald lb .16½- —
Sec. 99-99% dms. c.l. f.o.b. works lb .22 —
dms. t.c.l. f.o.b works lb .23 —
tanks, f o b works lb .19½- —
Caprylic acid, dms lb. .27¼- .29¼
tanks lb. .24¼- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin NF from dom pepper dms lb 4.00 - —
NF, from African pepper, dms lb 4.50 —
Caraway oil, NF, dms lb. 4.25 - 4.50
Caraway seed Danish, bgs. lb .16 —
Dutch, bgs. lb. .15½- —
Carbazole, 97%, bbls, ton lots, works lb 1.05 —
Carbon black, channel, rubber heads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½- —
bgs., t.c.l., works lb. .16¾- —
furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns., t.c.l., whse lb. .13½- —
high abrasion, bulk, c.l., works, lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., t.c.l. dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works lb. .08¼- —
ctns., t.c.l., whse lb. .13 -
semi-reinforcing, bgs., c.l., works, lb. .05¾- —
bgs., ctns., t.c.l., whse lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., t.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., t.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide (moust wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E ton 60.00 115.00
bulk, 3,000,000 lbs or more, dlvd Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale works ton 85.00 - —
Carbon disulfide, 55-gal dms. c.l., works, frt equald to competitive points lb. .071 —
55-gal dms. t.c.l. same basis lb. .086 .091
5-gal dms. 30 dms to c.l., same basis lb. .131 —
5-gal dms., less than 30 dms., same basis lb. .161 —
tanks, f.o.b. works lb .0450- —
Carbon tetrachloride CP consumers dms. c.l. frt alld. lb. .12¾- —
dms. t.c.l. frt alld. lb. .15¼- —
Tech. consumers dms. c.l., t.l., frt. alld lb. .11¾- —
dms. t.c.l. t.l.l. frt alld lb. .14¼- —
tanks, frt alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms. 100-lb lots, works lb 4.00 4.25
dms. smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots lb.40.00 -43.00
Cardamom seed, bleached "A" lb. 3.25 - —
Bleached "B" lb. 3.05 - —
Decorticated Alleppey, cs. lb. 2.55 - —
Guatemala, cs. lb. 1.95 - —
Green, Alleppey, bgs lb. 1.90 - —
Ceylon, bgs. lb. 2.10 - —
Carmine No. 40, NF, bulk, 100-lb lots or more dlvd. lb.16.80 —
bulk, smaller lots, dlvd. lb.16.20 -17.30
Carnauba wax, chalky, bgs., ton lots, lb. .66 - —
North Country, No. 2, crude, bgs., ton lots lb. .73 Nom.
refd., pure, ton lots lb. .76 - .77
North Country, No. 3, Ceara, crude, ton lots lb. .58 - .60
North Country, No. 3, Parnahyba, crude, ton lots lb. .60 - .62
No. 3, refd., pure, bgs., ton lots, lb. .66 - .68
No. 1, Ceara, yellow, bgs., ton lots, lb. .83 - .83
Parnahyba, yellow, bgs., ton lots, lb. .85 - .86
Powdered carnauba wax, 20 to 100 mesh 8c over lb higher
Carotene tech 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram, .30¼- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb. dms., works million units. .12 - —
USP microcrystalline in oil, 400,000 A units per gram., dms, dlvd million units. .144 - —
b-Carotene in vegetable oil, semi-solid suspension 400,000 A units per gram cns kilo 57.60 - —
b-Carotene liquid in vegetable oil, 500,000 A units per gram, cns kilo 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns kilo.240.00 —
Carvol, bots. lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .32 —
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .86 - —
Casein, dom., edible, acid, precip., 80 mesh, bgs., 10,000 lb. lots or more, works lb. .84 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .18¾- .19¼
Australian, bgs., c.l., same basis lb. .21¼- —
New Zealand, same basis lb. .34 .35
Cashewnut shell liquid, treated, dms. c.l., Newark, N.J lb. .24 —
dms. ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½- —
Cassella acid, dms. frt alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns. lb. 6.50 - 8.00
Cassia, Padang, "A," bls lb .31 —
"B," bls lb .30 - —
"C," bls lb .29 - —
Korintje "A," bls lb .31 - —
"B," bls lb .29 - —
"C," bls lb .27 - —
Castor oil, dom., blown, dms., c.l., lb. .2553- —
dms. t.c.l lb .2650- —
dehydrated, bodied, dms., c.l. lb. .2700- —
dms. t.c.l lb .2850- —
tanks lb .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., t.c.l. lb. .2650- —
tanks lb .2360- —
hydrogenated, bgs., c.l. lb. .2475- —
bgs., ton lots lb. .2875- —
bgs., t.c.l., dlvd lb. .3075- —
raw, No. 1, dms., c.l. lb. .2200- —
dms., t.c.l. lb. .2300- —
tanks lb .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
refd., deod., dms., c.l. lb. .2750- —
dms. t.c.l. lb. .2750- —
tanks lb .2450- —
USP, dms. c.l. lb. .2350- —
dms., t.c.l lb .2450- —
tanks lb .2150- —
Imported, No. 1, Braz., tanks lb. .17¾- —
No. 3, tanks, same basis lb. .17¼- —
Sulfonated, 50% dms., works lb. .15 .15½
75% dms works lb .19 .19¼
Castor oil acids, dehydrated, dms. lb. .41¼- .43¼
Split, dms. lb. .33¾- .34¾
Castor pomace, bgs., c.l., works ton 35.00 - —
Castoreum nat., cns. lb 5.25 - —
Syn., cns lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ —
Resub., dms. works lb 4.29½ —
Catnip leaves, Southern, bls lb. Nominal
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic)
Cedarleaf oil USP XIII cns., dms. lb. 3.50 - 4.00
Cedarwood oil, cns., dms lb. 1.25 - —
Celery seed oil lb. 11.50 - —
Celery seed, French, bgs lb. .36 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 .51
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs. dlvd, E lb .595 .605
38% butyryl content, bgs., dlvd, E lb. .545 .555
38% butyryl content, hard-second, bgs., dlvd, E. lb. .545 - .555
50% butyryl content bgs dlvd, E lb. .585 .590
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000 lb lots or more works, frt alld lb. .57 - —
bgs. smaller lots, same basis lb .59 - —
standard, low or medium vis., bgs., c.l., t.l., frt. alld, E lb. .57 - —
bgs., ton lots, frt. alld. E lb. .59 - —
(Cellulose gum prices 1c. per lb. higher in west.)
Cerium hydrate, 74% CeO fib dms., 100-lb lots or more lb 1.40 - —
77% CeO, fib dms. 100-lb lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb 1.85 1.90
bgs., smaller lots, dlvd. lb 2.15 —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb .41½- —
fib cns. t.c.l. same basis lb .43½- —
tanks same basis lb .39 - —
Extra, cns. c.l. t.l., dlvd E lb .48½ —
fib cns. t.c.l., same basis lb .50½- —
tanks same basis lb .46 —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb. .95 - 1.10
Roman, cs. lb. 1.75 - 2.00
Chamomile oil, blue Hungarian bots lb 350.00 —
Charcoal activated NF fib dms. c.l., works lb. .34 —
fib, dms., 5-ton lots, works lb. .35 .35¼
fib dms, smaller lots works lb. .36 .50
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal hardwood, lump, bulk c.l., f.o.b plant ton 55.00 - —
briquets, bulk, c.l., f.o.b plant ton 80.00 - —
5-lb paper bgs., c.l., same basis ton 100.00 —
20-lb paper bgs. c.l., f.o.b plant, ton 90.00 - —
40-lb paper bgs c.l. same basis ton 86.00 —
Chenopodium oil, NF, cns lb 4.75 5.00
Chicago acid paste bbls. frt alld. lb 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech. 94% min. dms., c.l., works lb .49 - —
dms., t.c.l., works lb .51 - —
tanks, multiple units, 5 cars, dms. t.c.l. works lb .21 —
Chloral hydrate, USP jars, 1,000-lb lots lb 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb lots or less lb 1.05 - —
Chlordan, agricultural, dms., c.l., frt alld lb .65 - —
dms. t.c.l. 5,000-10,000-lb. lots, frt alld lb .66 —
clarified, dms., c.l., frt. alld lb. .69 - —
dms t.c.l. 5,000-10,000-lb. lots, frt alld lb .70 —
Chlorinated paraffin, 40% dms., c.l., frt alld lb. .15 - —
dms. t.c.l. 10 dms or more, same basis lb. .16 —
70% dms., c.l., same basis lb. .18½- —
dms. t.c.l. 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 8, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., t.c.l., works lb. .61 - —
125 cps. ctns. c.l., works lb. .70 - —
300 cps. ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., t.c.l., Metropolitan area, same basis lb. .12½- .13¼
tanks, single units works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald, same basis 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid mono, flake, 99% purif. dms., c.l lb. .23½- .25½
dms. t.c.l lb. .24½- —
tech. flake 96-97%, dms., c.l., frt. equald lb. .19 - —
dms. t.c.l. frt equald lb. .20 - —
3-Chloro-4-aminotoluene, tech., liq., dms., frt alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-3-aminotoluene, tech., liq., dms. frt. alld lb. .68 - —
m-Chloroaniline dms. c.l., frt. alld. lb. .75 - —
dms., t.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms. c.l., frt. alld. lb. .53 - —
dms., t.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline dms., c.l., frt. alld. lb. .77 - —
dms., t.c.l., same basis lb. .78 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
dms., t.l.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., t.c.l., works lb. 1.90 - —
o-Chlorobenzoic acid, fib dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms. c.l., dlvd. E lb. .18 - —
dms., t.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd lb. .27 - —
dms., t.c.l., dlvd. lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .90 - —
Powd., dlvd. E., 100% basis lb. 1.00 - —
4-Chloro-3-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms. frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt alld lb. .99 - —
o-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .25 - —
p-Chlorophenol, dms. c.l., frt. equald lb. .37 - —
dms. t.c.l. same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. t.c.l. same basis lb. .38 - —
Chloropicrin, comi., cyls., 120 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid dms., c.l., frt. equald lb. .0465- —
dms., t.c.l. frt equald lb. .0515- —
tanks frt equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher
o-Chlorotoluene tech. dms., t.l., works lb. .37 - —
dms. t.c.l., t.l.l. same basis lb. .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 - —
Choline chloride, 100-lb dms., frt. equald lb. 1.25 - —
Choline dihydrogen citrate, 100-lb. dms. frt equald lb. 1.25 - —
Chrome green c.p. dark, light, medium blue content, 14-15%, bbls dlvd E of Rockies, lb. .43 - —
blue content 16-30%, bbls., same basis lb. .44 - —
41-45%, bbls., same basis, lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W. of Rockies
Chrome orange CP bbls., dlvd. E of Rockies lb. .35 - —
Chrome orange prices 1c higher W of Rockies
Chrome yellow CP bbls., dlvd. E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W of Rockies
Chromic acid 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., t.c.l., dlvd N. Y. Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works, lb. .10 - —
Chromium fluoride bbls. works lb. .51 - .52
Chromium oxide hydrated, bbls., fib dms. c.l. frt alld. lb. 1.20 —
Pure, bgs., c.l., frt alld lb. .44½- —
bgs. t.c.l. same basis lb. .45¼- —
Chromium trioxide, NF bots lb. 1.15 —
Cinchona bark, NF, red, broken, bgs lb. .35 - —
NF yellow broken bgs lb. .35 .40
Cinnamic acid, refd., bots lb. 2.50 3.50
Cinnamic alcohol, bots lb. 1.50 1.60
Cinnamic aldehyde, dms lb. .80 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .58 - —
Ceylon, No. "0000," bgs lb. .67 - —
Cinnamon bark oil, bots lb.55.00 -74.00
Cinnamon leaf oil, crude, dms lb. 1.60 2.00
USP (Cassia), cns. dms lb. 8.50 13.50
Citral, CP, bots lb. 4.50 - 5.00
Extra, bots lb. 3.60 5.00
Syn., dms. lb. 7.25 7.40
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs. dms. 10,000-lb. lots, 1 shipt lb. .30 .30½
bgs., dms. smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l. lb. .27½- .28½
bgs. dms., 10,000-lb. lots, 1 shipt lb. .28 .28½
bgs. dms. smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher
Citronella oil, Ceylon, dms. lb. 1.05 - —
Java-type, dms. lb. .90 - 1.00
Citronellol, bots. dms. lb. 1.90 2.50
Synthetic, dms. lb. 1.70 - —
Civet, artif., bots. lb. 13.75 -15.00
Nat. bots. oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.00 -81.00
crushed shed moisture, bulk, c.l., Tenn ton. 9.00 -11.25
Imp., airfloated, bgs., c.l., Atl. port net-ton 43.00 -47.00
lump, bulk, Atl. port net-ton 31.50 -37.50
Clay, China, dom., dry-grd., airfloated, 99% 325 mesh, Georgia, bgs., c.l., works, ton. 11.00 -17.00
Georgia, bgs., t.c.l., works ton. 13.50 -22.50
Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton. 23.00 -36.00
white, powd., bgs. c.l. ex dock, net-ton. 50.00 —
bgs., t.c.l. ex whse net-ton. 60.00 -70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars New Jersey and New York gal. 19 —
Group 3 gal. .12875- —
Houston, Texas gal. .145 —
140° F Flash, tankcars, New Jersey or New York gal. .205 —
Group 3 gal. .154 - —
Houston Texas gal. .17 - —
Cleve's acid tech., mixed, solid, dms., frt alld lb 1.05 - —
1.6, tech., solid dms frt alld lb .77 - —
1.7 tech., dms. frt alld lb 2.20 - —
Clove bud oil, USP, dms. lb. 2.65 - —
Cloves, Madagascar, bgs. lb. .33 - —
Zanzibar, bgs. lb. .37 - —
Clove leaf oil, crude, dms lb. 1.10 - —
CMC, crude, 98.4% low or medium vis bgs., 23,000 lbs., dlvd. E., 100% basis lb. .40 - —
98.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .46
65% low or medium vis. bgs., c.l., dlvd. E., 100% basis lb. .40 - —
t.c.l., dlvd E., 100% basis lb. .42 - 1.00
CMC, purif. high vis. (see Cellulose gum). CMC prices W. of the Rockies are ½c. per lb. higher and are on a dlvd. basis.
Coaltar, crude, resale tar sum., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., t.c.l., ex whse gal. .38 - —
tanks works gal .20½- —
Coaltar pitch, aluminum, bulk, Works ton. 42.00 - —
Carbon, bulk works ton. 42.00 - —
Indust., bulk, works ton. 44.00 - —
Core bulk works ton 40.50 - —
Fiber bulk works ton 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type tanks, works ton. 41.00 - —
Cobalt acetate, 23.6% Co. dms., dlvd lb 1.04 - —
Cobalt blue, genuine, 250 lb. bbls. dlvd E of Rockies lb 4.90 - —
Cobalt blue prices 1c higher W of Rockies
Cobalt blue imitation (see Ultramarine blue)
Cobalt carbonate, 48% Co. powd., bgs., dlvd lb 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 - —
Cobalt linoleate, fused 8½% Co., dms., Liq., 6% Co. dms lb. .71½- —
Cobalt metal, 99% dms. f.o.b carrier lb 1.50 - —
Cobalt naphthenate liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co. bbls dlvd, lb .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. lb 1.15 - —
70-71% Co kgs. same basis lb 1.12 —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb 1.35 —
Cobalt resinate, fused 3% Co. dms lb. .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb .64 - —
Monohydrated, 23% Co. dms., dlvd lb 1.09 - —
Cobalt tallate 6% Co., dms. dlvd lb .44 - —
Cocaine, USP cns., 100-oz lots, f.o.b works oz. 17.50 - —
Cocaine hydrochloride, cns 100-oz lots f.o.b works oz. 13.75 - —
Cocillana bark bls lb .19 - .20
Cocoa butter, bgs. lb. .54 - .59
Coconut oil, crude, tanks, New York, lb. .12½- .12¾
tanks, Pac. coast lb. .11¾- —
Refd., deodorized, dms. lb. .19 - .20
Coconut oils, acid, dist. dms., lb. .21½- .24
tanks lb. .19 - —
double dist. (stripped), dms. lb. .22½- .25
tanks lb. .20 - —
Cod oil, dms., spot lb. .08¼- .08¾
Codeine, NF cns. 100-oz lots oz 13.25 - —
Codeine hydrochloride cns. 100-oz. lots oz 11.75 - —
Codeine phosphate USP, cns 100-oz lots oz 10.25 - —
Codeine sulfate USP cns 100-oz lots oz 10.75 - —
Codliver oil, USP, dms gal 1.40 1.70
Cohosh root, black, bls lb .20 .25
Blue, bls lb .20 .25
Colchicine, USP, bots. 27.50 -29.00
Colchicum root, bls lb .35 .45
Colchicum seed, bgs. lb. .85 .90
Collodion, USP, dms. lb. .32½- —
USP flexible dms lb. .34 —
Conocynth pulp, bls lb .75 —
Columbo root, bls lb .16 .18
Condurango bark, bls lb .18 .20
Congo copal gum, No. 1, bgs lb. .26 - .27
No. 2, bgs. lb .23 - .25
No. 3, bgs lb. .21 - .24
Copaiba balsam, cns., dms. lb. .85 - .95
Copaiba oil, cns lb 1.35 2.00
Copper acetate, bbls., c.l., works, lb. .53 —
bbls., t.c.l., works lb. .54 —
Copper carbonate, 55%, dark dense, c.l., works lb. .3545- —
bgs., t.c.l., works lb. .3695- —
Copper chloride, cupric, anhyd., dms., works lb. .44½- .45
cryst., dihydrate, dms., works, lb. .30¾- .31¼
cryst., dried, dms., works lb. .38¾- .39¼
cuprous, dms., works lb. .3995- .4295
Copper cyanide, tech., dms 20,000-lb lots or more lb. .609 —
dms, 1,000-lb lots or more lb. .619 —
dms, smaller lots lb. .639 .65
Copper gluconate, dms lb 3.20 —
Copper hydrate, dry, dms, c.l., frt. E of Miss lb. .52½- —
dms., t.c.l., same basis lb. .53 - —
Copper metal, electrolytic, dlvd. Valley, basis lb. .31 - —
Copper naphthenate liq. 8% Cu. dms, frt alld lb. .26½- —
Copper nitrate, tech., cryst. dms., works lb. .30¼ .33¼
Copper oleate, solid, 8% Cu dms., works lb. .48 - —

Copper oxide black bbls., 100-5,000 lb. lots, works lb. .47 - —
red., 97%, USN Type I, bbls., 100-5,000 lbs. lots lb. .47½- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works lb. .45½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .47 - —
Copper sulfate, CP, gran., dms., works lb. .1883- —
Cryst., 99%, bgs., c.l., works, 100 lbs.12.50 - —
bgs., l.c.l., works 100 lbs.13.00 -15.50
Monohydrated, 35%, dms., c.l., works 100 lbs.23.35 - —
dms., l.c.l., works 100 lbs.24.10 - —
Tribasic, distributors, 50-lb. bgs., c.l., works 100 lbs.28.60 - —
bgs., l.c.l., works 100 lbs.30.10 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton.157.50 - —
Pac. ports, c.i.f. ton.152.50 - —
Coriander oil, USP, bots lb. 6.25 - —
Coriander seed, Moroccan, bgs lb. .18 - —
Rumanian, bgs. lb. .14 - —
Yugoslavian bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .16½- —
Foots, (soapstock acid 95%) tanks, New York lb. .07¼- —
Refd., salad, dms. lb. .2247- .2275
tanks lb. .2023- —
Corn oil acids, dist., dms lb. .15½- .18
tanks lb. .13 - —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l. 100 lbs. 7.45 - —
Corn syrup, 43° Be., tanks, dlvd, N.Y. 100 lbs. 6.30 - —
non-ret. dms., c.l., same basis, 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP bots., kilo or more gram .95 - 1.75
Costus oil, bots oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton.63.00 -63.50
Cottonseed oil, crude, tanks, South, East lb. .13 Nom.
tanks, Valley lb. .13 Nom.
tanks, Texas, Waco lb. .12½ Nom.
Foots (soapstock, acid 95%), New York, tanks lb. .04½- Nom.
Refd., salad, dms. lb. .16¾- .18¾
tanks lb. .16¾- —
Cottonseed oil acids, dist., dms lb. .15½- .18
tanks lb. .13 - —
Coumarin, NF, cryst., dms. lb. 3.20 - 3.30
Cramp bark, NF, bls. lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF bots., chys., lb. 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln 80%, tanks, works, gal. .226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF chys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms. incl., c.l., works, lb. .0611- —
dms. incl., l.c.l., works lb. .0684- —
dms. incl., l.c.l. ex whse, New York lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same lb. .18 - —
non-ret. dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms., c.l., works, lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C, dms., c.l., frt. equald, lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C, m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd. lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd. lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Imp., metapara content 25% or less, f.o.b. works, frt. equald, to competitive points, c.l. gal. 1.15 - —
l.c.l., f.o.b., works gal. 1.20 - —
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l. works lb. .23 - —
Crotonic acid, 200-lb. dms., c.l., dlvd. lb. .49 - —
dms., l.c.l., dlvd lb. .51 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
bgs., l.c.l. works 100 lbs.14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs., l.t.l., works lb. .23 - —
Cubeb berries, NF, bgs. lb. 1.30 - —
Powd., cs. lb. 1.45 - —
Cubeb oil, cns lb. 8.75 - 9.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .19 - —
Moroccan, bgs. lb. .36 - —
Turkish, bgs. lb. .18 - —
Cumin seed oil, bots., cns lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract, ton 57.00 - —
pulv., 21% N, bgs., works, unit 4 ton. 2.85 - —
Cyanamide, indust. grade, bgs., c.l., works ton.75.00 - —
bgs., l.c.l., works ton.96.00 - —
Indust. grade, 6-16 mesh, dms., c.l., works ton.120.00 - —
dms., l.c.l., works ton.140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 - —
dms. l.c.l. same basis gal. 1.10 - —
dms., c.l., dlvd W of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
98% tech. 40-dm. lots or more, f.o.b works gal. .58 - —
5-39 dms. same basis gal. .60 - —
tanks, same basis gal. .38 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E lb. .30½- —
dms., l.c.l., works, same basis, lb. .31½- —
tanks, works, same basis lb. .28 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l. works lb. .34½- —
tanks, works lb. .31 - —
Cyclohexylamine, tech., dms., c.l., works lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cypress oil, bots. lb 5.30 - —

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2,4-D tech. bgs., dms., c.l., works, frt equald lb. .40 —
bgs. dms. l.c.l. same basis lb. .45 .49
2,4-D butyl ester dms. c.l., works, lb. .43 —
dms., l.c.l., same basis lb .48 .52
tanks, same basis lb .42 —
2,4-D isopropyl ester, dms., c.l., works lb. .43 —
dms., l.c.l., works lb. .48 .52
tanks, works lb .42 —
Dammar gum Batavia, A E. cs lb No stocks.
East India Batu, bold, bgs lb. .15½ .18
nubs and chips, bgs lb. .10 - .11
black, bold, bgs lb. .16 - .18
nubs and chips, bgs lb. .13 - .14½
unscraped bgs. lb .13 - .14½
pale, chips, bgs lb. .16 - .18
pale nubs, bgs. lb .20¾ .24
Siam cs lb .31½- .34
Singapore, No. 1, bgs. lb. .38 .44
No. 2, bgs. lb. .29 .32
dust, bgs. lb. .18 .20
No. 3, bgs. lb. No stocks.
Dandelion root, bls lb .35 .40
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .21 - —
bgs. smaller lots, same basis lb. .23 - —
fib. dms., c.l., same basis lb. .22 - —
fib dms., smaller lots, same basis lb. .25 - —
Powdered DDT 1c per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate)
i-Decanol, tech. dms. c.l., dlvd E. lb. .41½- —
dms., l.c.l., dlvd. E lb. .43½- .44½
tanks, dlvd. E lb. .37½- —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .20½- —
dms., l.c.l., dlvd lb. .22 - —
tanks, dlvd. lb. .18 - —
Perfume grade, bots. lb 1.00 1.00
Decyl alcohol, normal (see i-Decanol)
Deertongue leaves, bls. lb. .50 .60
Defluorinated phosphate, feed grade, 18% P, paper bgs., c.l., t.l., Tupelo, Miss ton.52.00 - —
18% P, paper bgs., c.l., Plant City, Fla ton.51.25 - —
paper bags, c.l., works, Wales, Tenn. ton.68.00 - —
18% P, paper bgs., c.l., t.l., works, Houston, Tex. ton.89.25 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

LEATHER LASTS LONGER...THANKS TO COLUMBIA-SOUTHERN CHEMICALS

Modern chemistry enhances leather's traditional quality by improving the age-old art of tanning. Soaking, unhairing and tanning steps have been reduced from a matter of weeks to days or hours; and the finished leather is stronger, more shrink-resistant and more supple through uniform chemical treatment. Columbia-Southern Chemicals, including sodium sulfides and sodium bichromate, help today's tanners keep up as demand grows to 700 million pairs of shoes each year. And leather is also the material of preference for beauty and long life in belts, wallets, jackets and luggage. Throughout industry, other Columbia-Southern Chemicals such as chlorine, caustic soda and soda ash provide the raw materials and processing aids that convert old arts to profitable mass production. Find out how our customer-oriented planning may fill *your* chemical needs better.

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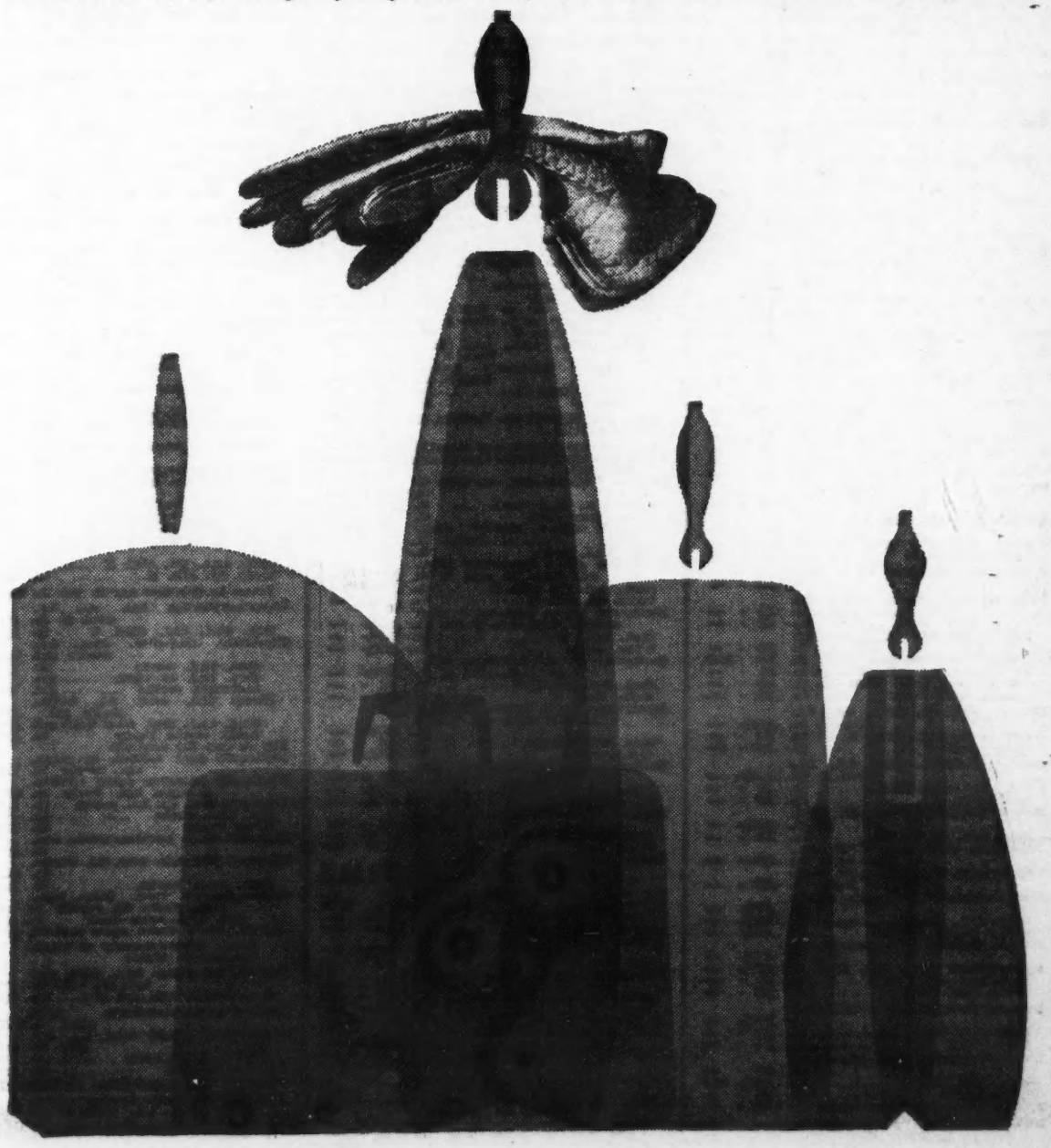
CHEMICAL DIVISION
PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER PITTSBURGH 22, PENNSYLVANIA



Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb. dms lb. 12 • —
Denatured alcohol, ethyl CD-18, CD-19, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., t.c.l., same basis gal. .74½- .80½
tanks, dlvd. same basis gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .72 • —
dms., t.c.l., same basis gal. .77 • .83
tanks, same basis gal. .56 • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .70½- —
dms. t.c.l. same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms. c.l. dlvd. E. of Rockies gal. .69 • —
dms., t.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms. t.c.l. same basis gal. .73 • .79
tanks, same basis gal. .52 • —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., t.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD29, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., t.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l. dlvd. E. of Rockies gal. .68 • —
dms., t.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., t.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD-40, dms., dlvd. E. of Rockies, gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.40 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 • —
paper bgs., l.c.l. 100 lbs. 9.54 • —
canary dark, paper bgs., c.l. 100 lbs. 9.23 • —
paper bgs., l.c.l 100 lbs. 9.38 • —
Indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 • —
paper bgs., l.c.l 100 lbs. 9.28 • —
white paper bgs., c.l. 100 lbs. 8.97 • —
paper bgs., l.c.l 100 lbs. 9.12 • —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher
Dextrose, anhyd., comi., bgs., c.l. 100 lbs. 8.65 • —
bgs. l.c.l. 100 lbs. 8.80 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 • —
100-lb. dms. 100 lbs. 15.20 • —
Hydrated, comi., bgs., c.l., ex whse 100 lbs. 7.45 • —
bgs. c.l., ex whse 100 lbs. 7.60 • —
USP dms. lb. .19¾- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd. lb. .17 • —
tanks, dlvd lb. .13 • —
Tech., dms., c.l., dlvd. lb. .15 • —
dms., t.c.l., dlvd. lb. .16½- —
tanks, dlvd lb. .12½- —
Diacetyl, flavor grade, bots lb. 3.30 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., t.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., t.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Diallylamine, dms., c.l., dlvd. lb. .98½- —
dms., t.c.l., dlvd. lb. 1.00 • —
tanks, dlvd lb. .96 • —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 • —
Dibenzyl sebacate, dms., c.l., works. lb. .93 • —
dms., t.c.l., same basis lb. .94 • —
tanks, same basis lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd lb. .65 • —
t.t.l., dms., same basis lb. .68 • —
Food grade, c.l., t.l., dms., dlvd. lb. .65 • —
dms. t.t.l., same basis lb. .68 • 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 • —
dms., t.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., t.c.l., t.t.l., dlvd. E lb. .33 • —
tanks, dlvd E lb. .29 • —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., t.c.l., t.t.l., dlvd. E lb. .33 • —
tanks, dlvd. E lb. .29 • —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., t.c.l., same basis lb. .33 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .29 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .29 • —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., t.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
dms., t.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —
Dicapryl phthalate, dms., c.l., dlvd. lb. .28½- —
dms., t.c.l., dlvd. lb. .30 • —
tanks, dlvd. lb. .26 • —
Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., t.c.l., works lb. .63½- .64
tanks, works lb. .61 • —
2,5-Dichloroaniline, dms., works lb. .83 • —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 • —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., t.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 • —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 • —
dms., 2,000 lbs. or more, same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., t.c.l., or t.t.l., works lb. .34 • —
tanks, works lb. .32 • —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., t.c.l., t.t.l., same basis lb. .17 • —
tanks, same basis lb. .13 • —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 • —
dms., t.c.l., same basis lb. .75 • —
Dichloropentanes, dist., dms., c.l., works lb. .05 • —
dms., t.c.l., works lb. .06 • —
tanks works lb. .03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms. c.l., works. lb. .54 • —
dms., t.c.l., works lb. .55 • —
tanks, works lb. .52 • —
Dicyclohexyl phthalate, gran., fib. dms. c.l. works frt alld. lb. .49½- —
fib. dms., t.c.l., same basis lb. .51½- —
Dicyclopentadiene, dms. c.l., t.c.b. works lb. .14½- —
dms., t.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 • —
Didecyl phthalate dms. c.l., works. lb. .27½- —
dms., t.c.l., same basis lb. .29 • —
tankcars, tanktrucks, 2,000 gals. lb. .25 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l. dlvd. lb. 1.85 • —
dms., t.c.l. dlvd. lb. 1.90 • —
Diethanolamine dms. c.l., dlvd E. lb. .27 • —
dms., t.c.l. same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., t.t.l. frt. alld. lb. .28½- —
tanks, frt alld lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms. c.l., t.c.b. works lb. .47½- —
dms., t.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 • —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., t.c.l., dlvd. lb. .71 • —
tanks, dlvd lb. .67 • —
Diethyl oxalate, dms., c.l., t.c.b. works lb. .42½- —
dms., t.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Diethyl phthalate, dms., c.l., dlvd. lb. .29¾- —
dms., t.c.l., dlvd. lb. .31¼- —
tanktrucks, 1,000-1,999 gals, same basis lb. .27¾- —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. .27¼- —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 • —
dms., t.c.l., frt. alld. E lb. .22½- —
tanks, frt. alld. E lb. .18½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms., t.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer dms. c.l., t.l., works. lb 2.30 • —
5-44 dm. lots, works lb 2.35 • —
1-4 dm lots, works lb 2.40 • —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt alld lb. .83 • —
Diethylamine, dms., c.l., dlvd & dms., t.c.l., same basis lb. .52 • —
tanks, same basis lb. .53½- —
N,N Diethylaniline dms., c.l., frt. alld lb. .49½- —
dms., t.c.l., same basis lb. .57 • —
tanks, same basis lb. .58 • —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. .17½- —
f.o.b. Zone 2 lb. .18½- —
380-lb. dms., t.c.l., c.l., f.o.b. Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —
tankcars, Zone 1 lb. .15 • —
Zone 2 lb. .16 • —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies.
Di-2-ethylhexyl adipate (see Di-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-octyl phthalate), phthalate).
Diethylene glycol dms. c.l., dlvd E. lb. .17¾- —
dms., t.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .55 • —
dms., t.c.l., works lb. .55¾- —
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾- —
dms., t.c.l., frt. alld. E lb. .32¼- —
tanks, frt. alld. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., t.c.l., works lb. .31½- —
tanks, works lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .22½- —
dms., t.c.l., dlvd. E lb. .24 • —
tanks dlvd E lb. .20 • —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., t.c.l., works lb. .28 • —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., t.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E. lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 • —
dms., t.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E. lb. .41½- —
Diethylstilbesterol, USP, bots. 10-kilo lots kilo 100.00 147.50
bots. 1-kilo lot kilo 110.00 -152.50
Digitalis leaves USP dom. dms lb 1.25 —
Digitoxin, USP, bots gram 3.75 4.20
Diglycol laurate, dms., ton lots lb. .32½- —
Diglycol stearate, dms., t.l. lb. .26 • —
Diglycolic acid bgs. c.l., t.l., works. lb. .15½- —
bgs. t.c.l., works lb. .16 • —
Dihexyl sebacate, dms., c.l., works. lb. .66 • —
dms., t.c.l., works lb. .67 • —
tanks, works lb. .64 • —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin sulfate, bulk, gram .03 • —
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 • —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 • —
Tech., dms., 20,000 lbs or more lb. 1.11 • —
dms., 1,050 lbs to 20,000 lbs. lb. 1.13 • —
dms., 150 lbs to 1,050 lbs lb. 1.15 • —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 • —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E. lb. .31½- —
dms., t.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 • —
Di-isobutylene dms. c.l., dlvd. E lb. .10 • —
dms., t.c.l., dlvd. E lb. .11½- —
tanks, dlvd E. lb. .08 • —
Di-iso-octyl phthalate, dms., c.l., works lb. .29 • —
dms., t.c.l., same basis lb. .30½- —
tanktrucks, 1,000-1,999 gals., works lb. .27 • —
tankcars, tanktrucks, 2,000 gals., works lb. .26½- —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 • —
dms., t.c.l., works lb. .61¼- —
tanks, works lb. .60 • —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., t.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., t.c.l., same basis lb. .52 • —
tanks, same basis lb. .48 • —
Dillweed oil, dom., bots., dms lb. 5.25 • —
Dimethyl anthranilate, cns. lb. 4.15 • —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb. 3.50 • —
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E lb. .78 • —
dms., t.c.l., dlvd. E lb. .79½- —
tanks, dlvd. E lb. .75½- —
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines lb. .78 • —
dms., t.c.l., dlvd. 100% basis. lb. .79½- —
tanks, dlvd., 100% basis lb. .75½- —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .29¾- —
dms., t.c.l., works lb. .31¼- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27¾- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27¼- —
Dimethyl sebacate, dms., c.l., works. lb. 1.30 • —
dms., t.c.l., works lb. 1.30½- 1.31
tanks, works lb. 1.28 • —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., t.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .17½- —
dms., t.c.l., works lb. .18½- .19½
tanks, works lb. .15 • —
Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 • —
dms., t.c.l., same basis lb. .37 • .38
tanks, same basis lb. .33 • —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 • —
dms., t.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 • —
40% soln., dms., c.l., frt. equald., 100% basis lb. .35 • —
dms., t.c.l., frt. equald, 100% basis lb. .35½- —
lb. .28 • —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 • —
dms., t.c.l., same basis lb. .29 • —
tanks, same basis lb. .26 • —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., t.c.l., works lb. .33 • .34
tanks, works lb. .30 • —
2,4-Dinitroaniline, dms., frt. alld lb. .75 • —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies. lb. 1.61 • —
Dinitroaniline orange toner prices 1c. higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 • —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., t.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 • —
2,4-Dinitrophenol bbls. lb. .41 • —
2,4-Dinitrotoluene, oil, dms. lb. .11 • —
Refd. 63°C. dms. lb. .23 • —
Dioctyl adipate, dms., c.l., works lb. .38½- —
dms., t.c.l., works lb. .39½- —
tanks, works lb. .36 • —
Dioctyl phthalate, dms., c.l., frt. alld. E lb. .27 • —
dms., t.c.l., frt. alld. E lb. .29½- —
tanktrucks, 1,000-1,999 gals., same basis lb. .25 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .24½- —
Dioctyl phthalate prices ¾c. higher in West.
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., t.c.l., works lb. .62¼- —
dms., t.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½- —
dms., t.c.l., frt. alld. E lb. .33 • —
tanks, frt. alld. E lb. .29 • —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs. c.l., t.l., dlvd. E lb. .34 • —
bgs., t.c.l., t.t.l., dlvd. E lb. .35 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., t.c.l., works lb. .62 • —
dms., t.c.l. ex whse. gal. .78 • —
tankscars, works gal. .41 • —
Steam dist., dms., c.l., works, South gal. .72 • —
dms., t.c.l., dlvd. New York gal. .91 • —
tanks, works, South lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 • —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 • —
Diphenyl, bgs., c.l., t.l., works lb. .16¾- —
bgs., t.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide perfume grade, cns. lb. .55 • .70
Diphenyl phthalate, dms., c.l., works. lb. .52 • —
dms., t.c.l., works lb. .54 • —
Diphenylamine, retd., flake, bgs., c.l., works, frt. equald lb. .32 —
bgs., t.c.l., same basis lb. .34 —
Refd., fused, tanks, same basis lb. .29 • —
Refd., diphenylamine in dms., ½c. per lb higher.
Diphenylguanadine, bgs., dms., ton lots, frt. alld lb. .51 • —
bgs., smaller lots, frt. alld lb. .52 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 • —
dms., t.c.l., frt. alld. lb. .18½- —
tanks, frt. alld. lb. .14¼- —
Dipropylene glycol prices 1c. higher in West.
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 —
dms., t.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 • —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .71 • —
dms., smaller lots, frt. alld lb. .73 • —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .86 • —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 • —
dms., t.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
80-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., t.c.l., works, 100% basis. lb. 1.05 • —
tanks, same basis lb. .90 • —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb. .50 • —
dms, t.c.l., t.t.l., same basis lb. .52 • —
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald lb. .134 • —
dms., t.c.l., same basis lb. .144 • —
tanks, same basis lb. .11 • —
Dodecylphenol, c.l., frt. alld. lb. .22½- —
dms., t.c.l., same basis lb. .23½- —
tanks, same basis lb. .20 —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 25-lb.lots, frt. prepaid or alld.
Blue, FD&C, No. 1 lb. 15.65 -16.45
No. 2 lb. 15.65 -16.45
Green, FD&C, No. 1 lb. 15.65 -16.45
No. 2 lb. 19.60 -20.40
No. 3 lb. 31.30 -32.10
Red, FD&C, No. 2 lb. 3.60 - 4.40
No. 3 lb. 19.60 -20.40
No. 4 lb. 6.60 - 6.80
Yellow, FD&C, No. 5 lb. 3.75 - 4.55
No. 6 lb. 3.65 - 4.45
Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No. 6 lb. 15.65 -16.10
No. 7 lb. 14.35 -14.80
Orange, D&C, No. 3 lb. 10.50 -10.95
No. 4 lb. 19.60 -20.05
No. 5 lb 3.80 4.25
Red, D&C, No. 17 lb. 10.50 -10.95
No. 18 lb. 23.60 -24.00
No. 19 lb. 15.00 -15.45
No. 21 lb 3.90 4.35
No. 22 lb. 10.50 -10.95
No. 28 lb. 24.15 -24.65
No. 33 lb. 17.00 -17.45
Violet, D&C, No. 2 lb. 15.65 -16.10
Yellow, D&C, No. 7 lb. 10.50 -10.95
No. 8 lb. 10.50 -10.95
No. 10 lb. 13.05 -13.50
No. 11 lb. 13.05 -13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:
Blue, Ext., D&C, No. 1 lb. 15.65 -16.10
Green, Ext., D&C, No. 1 lb. 15.65 -16.10
Red, Ext., D&C, No. 1 lb. 13.05 -13.50
Yellow, Ext, D&C, No. 1 lb. 10.50 -10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color index scale or prototype), contract dlvd No.
11110 Brilliant scarlet BN lb. 1.79 • —
13390 Fast blue SR lb. 1.57 • —
14025 Yellow 2G lb. 1.26 • —
14030 Orange R, extra, conc. lb. 1.64 • —
14645 Chrome black T lb. .77 • —
14720 Rubine XX, conc lb. 1.76 • —
15510 Orange Y, extra conc. lb. .83 • —
15575 Orange RR lb. .99 • —
15620 Fast Red A, conc. lb. 1.77 • —
15705 Chrome blue black R, conc. lb. 1.12 • —
16150 Scarlet 2RL lb. 1.22 • —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 • —
16230 Fast light, orange 2G lb. 1.39 • —
17590 Brown PG lb. 3.00 • —
18050 Phloxine 2G lb. 1.16 • —
18055 Fuchsine 6B lb. 1.55 • —
18965 Fast yellow 2G lb. 2.32 • —
19140 Yellow XX lb. 2.48 • —
19555 Yellow NN, conc. lb. 3.67 • —
20170 Brown Y lb. 1.33 • —
20470 Blue black, extra, conc. lb. 1.44 • —
21010 Brown, RX, conc lb. 1.42 • —
22240 Scarlet B lb. 2.81 • —
22310 Red FC lb. 1.57 • —
22311 Brown MCW lb. 1.59 • —
22610 Blue 2B, extra conc lb. 1.51 • —
23500 Red 4BX, conc. lb. 1.80 • —
24410 Sky blue FF, extra, conc. lb. 1.95 • —
24895 Brilliant yellow, conc. lb. 3.27 • —
26360 Navy blue 3R, conc. lb. 1.84 • —
26695 Black F, conc. lb. 2.30 • —
26900 Milling Red 3R, conc lb. 2.24 • —
27075 Neutral black 2B, conc. lb. 2.75 • —
27720 Gray L lb. 2.18 • —
29185 Fast scarlet 4BNC lb. 2.23 • —
30015 Diazo black VJ conc. lb. 2.48 • —
30045 Yellow brown K, extra lb. 1.45 • —
30235 Black EB, 200% lb. 1.33 • —
30295 Green BY conc. lb. 1.07 • —
35660 Brown B lb. 2.89 • —
37565 Naphthol SWF lb. 1.85 • —
40000 Yellow 2G lb. 1.44 • —
41000 Yellow OX lb. 2.45 • —
42000 Green V crystals lb. 2.73 • —
42040 Brilliant green G crystals lb. 3.62 • —
42090 Blue EG lb. 1.85 • —
42100 Milling green 6B, conc. lb. 4.78 • —
42640 Violet 4BXN lb. 2.43 • —
43830 Brilliant blue, BBG lb. 2.44 • —
44045 Blue B, extra conc. lb. 3.61 • —
45170 Red BX lb. 4.76 • —
50415 Nigrosine SSJ lb. 1.03 • —
52015 Blue GXX lb. 2.54 • —
58005 Alizarin red SC lb. 3.64 • —
59700 Golden orange GFD, single paste lb. 2.70 • —
59710 Flaming orange 6RD double powder lb. 4.90 • —
59800 Dark blue BO, single paste. lb. 2.28 • —
59825 Jade green NC supra, double paste lb. 1.75 • —
61570 Alizarin green CG extra lb. 3.81 • —
63010 Alizarin blue SAPG lb. 3.90 • —
63615 Alizarin blue black B lb. 3.26 • —
69825 Blue BLFD double paste lb. 2.76 • —
70800 Brown BR single paste lb 2.03 • —
Dyes, coaltar, oil-soluble, 100-lb drums, dlvd, No.
12140 Oil scarlet BL lb. 1.87 • —
12055 Oil orange 7078 V lb. 1.38 • —
26120 Oil red N 1700 lb. 1.94 • —
42535B Methyl violet base lb. 1.83 • —
44045B Victoria blue base lb. 4.06 • —
50415B Oil black 8603 lb. .80 • —
61565 Alizarin cyanine green base. lb. 6.13 • —
Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB lb. 3.89 • —
Spirit brown GN lb. 5.30 • —
Spirit orange R conc. lb. 5.87 • —
Spirit red B conc. lb. 6.41 • —
Pr 517 Spirit yellow 2R conc lb. 4.62 • —
Pr. 554 Spirit blue THN lb. 5.06 • —

E

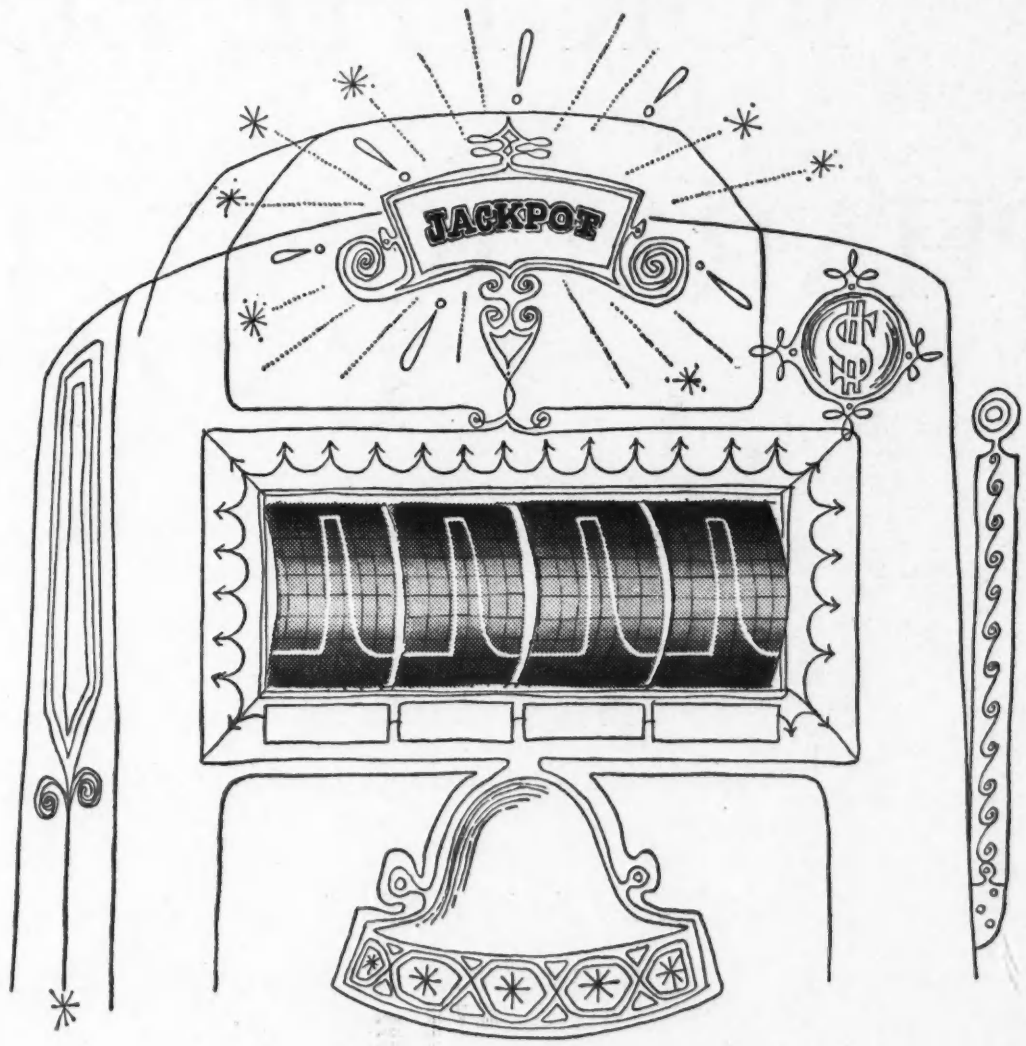
Echinacea root, bls. lb. 1.25 • —
Elm bark, grinding, bls. lb. .30 • .33
Powd., bbls., bxs lb. .60 • —
Select, bundles lb 75 • —
Emetine hydrochloride, USP, bots oz. 48.40 • —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd. lb. 2.77 • —

Eosin red toner, bbls., works ... lb. 1.95 - —
Ephedrine, syn., USP, anhyd., bots. 100-oz.lots oz. .98 - 1.00
hydrous, bots., 100-oz. lots. oz. .92 - —
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd. lb. .29½- —
dms., l.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .27 - —
Epinephrine base, syn., USP, bots., 100 gram. lots gram. .58 - —
Epsom salt (see Magnesium sulfate).
Erigeron oil, ens. lb. 11.00 - —
Ergot, NF, dms., tin-lined lb. 2.00 - 2.50
Eserine salicylate, bots. oz. 34.50 - 40.00
Eserine sulfate, bots. oz. 26.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd. Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18½ - —
Wood-rosin type dms. c.l., same basis lb .18½ - —
Ether (see specific product)
Ethyl acetate, nat., ferment, 85-88%, dms. c.l. dlvd lb. .15 —
dms., l.c.l., dlvd lb. .16½ - —
tanks dlvd lb. .12½ - —
95-98% dms. c.l., dlvd. lb. .15¼ - —
dms., l.c.l., dlvd lb. .16¾ —
tanks dlvd lb. 12¾ —
99%, dms., c.l., dlvd lb. .15½ - —
dms., l.c.l., dlvd lb. .17 —
tanks, dlvd lb. .13 —
Syn., 85-88%, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
95-98%, dms., c.l., dlvd. lb. .15¼ - —
dms. l.c.l., dlvd lb. .16¾ —
tanks dlvd lb. .12¾ —
99%, dms., c.l., dlvd. lb. .15½ - —
dms., l.c.l., dlvd lb. .17 —
tanks dlvd lb. .13 —
Ethyl acetoacetate, dms., c.l., dlvd. lb. 58½ - —
dms., l.c.l. dlvd. lb. .60 —
tanks, dlvd lb. .56 —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .34¾ - —
dms., l.t.l., dlvd lb. .35¼ - —
tanks, dlvd. lb. .32¼ - —
Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd E. of Rockies gal. 20.63 —
dms. l.c.l. same basis gal. 20.73 - 20.84
USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .78 .89
tanks, same basis gal .52 —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E. of Rockies gal. 21.75 —
dms., l.c.l., same basis gal. 21.85 - 21.98
tanks, same basis gal. 21.59 —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate USP (see Benzocaine).
Ethyl amyl ketone dms. c.l., dlvd. lb. .20 —
dms. l.c.l. same basis lb. .21½ —
tanks same basis lb. 17½ —
Ethyl benzoate bcts. lb. .75 1.05
Ethyl bromide tech., 98%, dms., c.l., frt. alld. E lb. 43 - —
dms. l.c.l. frt alld E lb. 45 - —
tanks, frt. alld. E lb. .40 - —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 —
dms., l.c.l., works lb. .30¾ - —
tanks, works lb. .28 - —
Ethyl butyl ketone dms. c.l., t.l., works lb. .36 - —
dms. l.c.l., t.l. works lb. .36¾ - —
tanks works lb. .34 - —
Ethyl butyrate dms. works lb. .85 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 4 cps. ngs., 5,000 lb lots or more, frt. alld E lb. .73 - —
ngs. smaller lots frt alld E lb. .75 - —
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots frt alld E. lb. .70 —
Ethyl chloride tech. cyls., works. lb. .20 .22
dms., works lb. .18 .20
tanks works lb. .10 —
Ethyl cinnamate, ens lb. 3.35 - 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd E lb. .43½ - —
dms. l.c.l. dlvd E lb. .44½ - —
tanks dlvd E lb. .41½ - —
Ethyl ether, absolute, ACS, dms lb. .27 —
Anesthesia USP dealers, 1-lb. ens lb. 1.01 - —
½ lb. ens lb 1.09 - —
¼-lb ens. lb 1.21 - —
Indust., dms. c.l. dlvd. lb. .13½ - —
dms., l.c.l., dlvd E lb. .15 - —
tanks dlvd E lb. .11 - —
2-Ethyl hexoic acid dms., c.l., t.l., dlvd E lb. .37 - —
dms. l.c.l., t.l. dlvd E lb. .38½ - —
tanks, dlvd E lb. 34½ —
2-Ethyl hexoic acid 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, dms., c.l. t.l., straight or mixed frt. alld. E lb. .39½ - —
dms., l.t.l., same basis lb. .40½ - —
tanks, same basis lb. .37 - —
2-Ethylhexyl alcohol, dms., c.l., dlvd. E lb. .20½ - —
dms., l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18 - —
Ethyl iodide, chys. works lb. 3.30 - —
Ethyl methacrylate dms. c.l., frt. equald lb .52 —
dms. l.t.l. frt equald lb .53½ - —
tanks frt equald lb 50 —
Ethyl morphine hydrochloride, USP bots oz. 11.85 —
Ethyl oenanthate dms lb 1.05 1.30
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate dist (see Tetraethyl orthosilicate).
Ethyl silicate 40% available SiO_2 dms., c.l., dlvd. E lb. .49 - —
dms., l.c.l., dlvd. E lb. .50½ - —
tanks, dlvd. E lb. .47 - —
N-Ethyl-a-naphthylamine dms. works lb 1.04 - —
N-Ethyl-m-toluidine tech., liq., tanks frt alld lb .83 - —
N-Ethyl-o-toluidine, bbls lb. .88 - —
Ethylamine (see Mono- Di- or Tri-)
N-Ethylaniline dms. c.l. frt alld. lb .57 - —
dms. l.c.l. frt alld lb .58 - —
tanks, frt. alld lb. .55 - —
Ethylbenzene 99% dms. c.l., t.l., frt. equald lb. .14 - —
dms l.c.l., same basis lb. .16 - —
tanks, same basis lb. .11¼ - —
Ethylene, contract refy gate lb .0475 - .052
Ethylene dibromide dms. c.l., frt. equald lb. 30½ —
dms. l.c.l. frt equald lb 31½ —
tanks frt equald lb 28½ —
Ethylene dichloride dms. c.l. dlvd. lb .11½ - —
dms. l.c.l., same basis lb .13 —
tanks same basis lb .09 —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher

Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
Ethylene glycol monobutyl ether, dms. c.l., dlvd E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23½ - —
tanks, dlvd. E lb. .19½ - —
Ethylene glycol monoethyl ether, dms. c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½ - —
tanks, dlvd E lb. .18½ - —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½ - —
dms., l.c.l., dlvd. E lb. .21 - —
tanks, dlvd. E lb. .17 - —
Ethylene glycol monomethyl ether, dms. c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½ - —
tanks, dlvd E lb. .18½ - —
Ethylene glycol monomethyl ether acetate, dms., c.l., works lb. .29 - —
dms., l.c.l., works lb. .29¾ - —
tanks, works lb. .27 - —
Ethylene glycol monostearate, flake, 150-lb. ctn lb. .33 - —
Ethylene oxide, dms. c.l. dlvd E. lb. .21½ - —
dms., l.c.l., dlvd. E lb. .24½ - —
tanks, dlvd E lb. .15½ - —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88%, dms., c.l., dlvd. E., 100% basis lb. .40 - —
dms l.c.l. dlvd E. 100% basis. lb. .41½ - —
tanks, dlvd. E., 100% basis lb. .38 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. lb. 7.40 - —
Eucalyptol, USP, ens., dms lb. .85 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms lb. .45 - —
NF, rectified, 80-85%, dms. lb. .53 - .59
Eugenol, tech., dms lb. 0.00 - —
USP, dms. lb. 1.90 - —
Euphorbia herb, bls lb. .12 - .15

F

F salt paste, tech., dms., works lb. 2.50 - —
Fennel oil, sweet, USP, ens. lb. 2.60 - —
Fennel seed, Argentine, bgs. lb. .17 - —
French, light, bgs lb. .16 - —
Indian, light, bgs lb. .17½ - —
Rumanian, bgs lb. .14 - —
Yugoslav, light, bgs lb. .16½ - —
Fenugreek seed, Moroccan, bgs lb. .09 - —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., l.c.l., works 100 lbs. 9.00 - —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 - 6.75
bbls. l.c.l., works 100 lbs. 5.75 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt. equald, 100% basis 100 lbs. 4.00 -
USP cryst., dms., t.l., works lb. .08½ - —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF, 175-lb. dm lb. 4.25 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .18¼ - —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. 1.30 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb. dm. lb. .79 - —
Ferric resinate, dms., ton lots, frt. alld lb. .45 - —
Ferric stearate, dms., c.l., frt. alld. lb. .39 —
dms., l.c.l., frt. alld lb. .40 .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 —
bgs., l.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 —
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms. lb. .68 - —
NF, green, gran., 100-lb. dms., frt. equald lb. .68 - —
Ferric-ammonium oxalate, fine gran., dms lb. .27½ .29¼
Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works lb. .32½ - —
Ferric-sodium oxalate, fine gran., dms lb. .27½ .29¼
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs 3.35 4.25
bbls., c.l., works ton 40.00 —
bulk, c.l., works ton. 27.00 —
USP, cryst., bbls., dms lb. .09½ - .10



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Celanese CHEMICALS

A GUIDE FOR THE BUYER OF PHARMACEUTICAL ENZYMES

In a previous ad we stressed the importance of specificity in developing successful nutritional and digestive aids for your ultimate consumers–for particular populations of biochemical deviates. Has it occurred to you that your supplier of bulk enzymes owes you a similar obligation of specificity?

The Enzymes You Use Should Be Pharmaceutical Enzymes

Because the specificity you try to build into your products necessarily starts with the bulk materials you buy, it is unreasonable to expect satisfactory developments for these products if the enzymes you purchase were developed for some industry foreign to your own. You must make certain that the "advantages" of the enzymes you use are indeed *pharmaceutical* advantages.

Here is how you can do it:

Buy Enzymes by the Unit

Units of activity of the enzymes you buy are one of the few real gauges of dollar value. Keep in mind, though, that units *can* be deceptive. You should rely on the expert opinion of your own chemists to tell you if the unit assay of your supplier is based on sound biochemical kinetics. A good test that *you can apply yourself* is to find out which was developed first: the enzyme or the assay. If the answer is "enzyme," be careful, for assays can be designed to magnify the merits of any enzyme already on the shelf, no matter what its real usefulness may be. If the answer is "assay," however, the assay is probably unbiased, as it first had to be used to choose and perfect the enzyme you are now looking at.

Make Sure the Unit is Active Where You Want It

Elementary physiology is sometimes forgotten when claims are made for enzymes. Be careful, therefore, that the pH optima of the enzymes you use fall within the proper physiological ranges. (A bit of inquiry here will reveal the comparative merits of plant, animal, bacterial and fungal enzymes.) Check temperatures and stabilities. It is known that some enzymes will give excellent results even under non-optimum conditions if they degrade slowly enough.

Don't Pay for What You Don't Want

If you want a particular kind of enzymic activity, you should not pay a premium for extraneous activity of a different type that "rides along" in the unstandardized portion of the enzyme preparation. *Pay only for standardized units active on the substrate that concerns you.*

Consider, too, another disadvantage hidden in some enzymes: unwanted bulk. It may not cost you more when you buy it, but it certainly costs you more when you process it. In mixing, filling or tableting, and packaging costs, in lowered utility and consumer appeal, every gram of inactive material costs you money.

Finally, determine that the technical assistance your supplier offers is useful in *pharmaceutical* problems.

Dollar for dollar—by all pharmaceutically meaningful criteria—MYLASE® 100, PROLASE® 300, and CELLASE™ 1000 offer you the best in standardized amylolytic, proteolytic, and cellulolytic activity.

For an indication of what Wallerstein enzymes will do for you, contact Gerry Gray. (For introductory data on digestive enzymes, send for bulletin 701.)

WALLERSTEIN COMPANY

Division of Baxter Laboratories, Inc.

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Fir balsam, Canada, bbls ..... gal 3.40 - 4.00
Oregon bbls ..... gal 3.40 - 4.64
Fir oil, Canada, ens ..... lb 1.70 - 1.75
Fish oil, refd., alkali, dms ..... lb .1380 - .1430
Kettle-bodied, dms ..... lb .1530 - .1580
Light-pressed, dms ..... lb .1280 - .1330
tanks ..... lb .1080 - —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram dms 1,000,000 units .12 - —
Fishmeal dom., menhaden 60% protein, grd., bgs., Atlantic and Gulf coasts ton 108.00 - 110.00
Fishscrap dom menhaden, dried, 60% protein, grd bgs., Atlantic and Gulf coasts ton 102.00 - 106.00
Fleaseed (see Psyllium seed)
Folic acid USP nots fib dms, kilo lots or more gram .25 - —
10% feed grade fib dms, 5 kilos or more kilo 30.00 - 44.00
Formaldehyde, 37% inhibited, 12 to 15% methanol), USP, dms, c.l. dlvd lb .0695 -
tanks, dlvd lb .0405 -
Formaldehyde, methanol-free (uninhibited) tanks dlvd lb .0375 -
Formic acid 85% chys c.l. works lb .1570 -
chys t.c.l., works lb .1620 - 1720
90% chys., c.l. works lb .1625 -
chys t.c.l., works lb .1675 - 1775
Fringetree bark, bls lb 55 - 70
Fumaric acid tech 250-lb dms., c.l. frt equald lb .23¼ -
dms t.c.l. frt equald lb .24¾ -
Fumaric acid in bags ½c per lb less
Furfural dms c.l. works lb .13 -
dms t.c.l works lb .14 -
tanks dlvd E lb .11½ -
tanks dlvd W lb .12½ -
Furfuryl alcohol cns., works lb .28 -
dms., c.l., t.l., Newark, N. J lb .19½ -
dms., t.c.l., t.t.l., Newark, N. J lb .20½ -
dms., c.l., t.l., Memphis, Tenn lb .18 -
dms., t.c.l., t.t.l., Memphis, Tenn lb .19 -
tanks, dlvd, E. of Denver lb .175 -
Fuse oil refd dms, c.l., dlvd lb .18 -
dms., t.c.l., dlvd lb .19½ -
tanks dlvd lb .15½ -

G

G salt bbls, frt alld, 100% basis lb 73 - —
Gallic acid NF VII bbls, 1,000-lb lots lb 2.00 - —
bbls, smaller lots lb 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb 1.78 - —
bbls, smaller lots lb 1.80 - 2.00
Gamma acid dry grd, bbls., frt alld lb 1.75 - —
Gammapicoline (see g-picoline)
Garlic oil dom, bots oz 4.75 - 6.05
Imp, bots oz 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin edible 75 AOAC test, bbls., c.l. dlvd lb .55 - —
150 AOAC test bbls, c.l. dlvd, lb .64 - —
200 AOAC test bbls, c.l. dlvd, lb .70 - —
225 AOAC test bbls, c.l. dlvd, lb .74 - —
275 AOAC test bbls, c.l., dlvd, lb .82 - —
Gelsemium root, bls lb .30 - .35
Gentian root bls lb .24 - —
Grd., bbls., bxs lb .30 - —
Powd, bbls bxs lb .30 - —
Geranol extra cns, dms lb 1.75 - 2.40
Soap grade dms lb .90 - 1.75
Standard cns, dms lb 1.65 - —
Synthetic dms lb 1.30 - —
Geranium oil, Algerian, cns lb 19.00 - 22.00
Bourbon, cns lb 17.00 - 19.00
Turkish (see Palmarosa oil).
Geranyl acetate cns lb 1.90 - 2.70
Synthetic dms lb 1.45 - —
Ginger oil, dist., bots lb 12.00 - 14.00
Ginger oleoresin NF from African root, bots lb 4.25 - 5.00
NF from Jamaican root, bots lb 7.75 - —
Ginger root, Cochin, bgs lb .19½ - —
Jamaican, No 3, bgs lb .28 - —
Nigerian, split, bgs lb .25 - —
Sierra Leone, bgs lb .35 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid tech 50% dms, c.l., t.l., f.o.b. works lb .20 - —
dms., t.c.l., f.o.b. works lb .21 - —
tanks, f.o.b works lb .17 - —
Glue, bone extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb .16 - —
131 jellygrams, bgs. c.l., same basis lb .16½ - —
164 jellygrams, bgs c.l., same basis lb .18½ - —
191 jellygrams, bgs. c.l., same basis lb .19½ - —
222 jellygrams, bgs., c.l., same basis lb .21 - —
Green, 40 jellygrams, bgs., c.l., same basis lb .16 - —
86 jellygrams, bgs. c.l., same basis lb .16 - —
115 jellygrams, bgs., c.l., same basis lb .16½ - —
135 jellygrams, bgs., c.l, same basis lb .17½ - —
164 jellygrams, bgs. c.l., same basis lb .18½ - —
180 jellygrams, bgs c.l., same basis lb .19½ - —
200 jellygrams, bgs., c.l., same basis lb .20½ - —
Bone glue t.c.l. prices 2c nigher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb .18 - —
95-149, bgs. c.l. dlvd lb .19 - —
122-149, bgs., c.l., same basis lb .20½ - —
150-177, bgs., c.l., same basis lb .22½ - —
178-206, bgs., c.l., same basis lb .25 - —
207-236, bgs., c.l. same basis lb .28 - —
237-266, bgs., c.l., same basis lb .30½ - —
267-293, bgs., c.l., same basis lb .32½ - —
299-330, bgs., c.l., same basis lb .34½ - —
331-362, bgs., c.l., same basis lb .36½ - —
363-394, bgs., c.l., same basis lb .38 - —
395-427, bgs., c.l., same basis lb .40 - —
428-460, bgs., c.l., same basis lb .42 - —
461-494, bgs., c.l., same basis lb .44 - —
495-529, bgs., c.l., same basis lb .46 - —
Hide glue t.c.l. prices 2c nigher.
l-Glutamic acid, 99½% fib dms., 100-lb lots, frt alld lb 1.80 - —
fib dms. 25-lb. lots, frt. alld lb 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo 150.00 - 300.00
Bots. 50-kilo lots kilo 100.00 - —
Bots. 500-kilo lots kilo 75.00 - —
Glycerine dom. nat. crude saponification 88% tanks dlvd, lb .13½ - .14
nat. crude soaplye 80% tanks, dlvd lb .12½ - .13¾
nat. refd. USP CP 99% dms., c.l., dlvd lb .26¾ -
dms., t.c.l., dlvd lb .27¾ -
tanks, dlvd, lb .24¾ -
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb .25¾ - —
dms., t.c.l., dlvd. lb .26½ - —
tanks, dlvd. lb .24 - —
nat. high gravity, dms., c.l., dlvd lb .26½ - —
dms., t.c.l., dlvd lb .27¼ - —
tanks, dlvd. lb .24¾ - —
Dom., refd., syn., 99.5%, dms., c.l., dlvd lb .26¾ - —
dms., t.c.l., dlvd lb .27½ - —
tanks, dlvd. lb .25 - —
Imp. nat. crude, soaplye, 80%, c.i.f lb Nom.
Glycine (see Aminoacetic acid)
Glycerol (see Glycerine)
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile 70% aqueous, dms., c.l., t.l., works lb 40 - —
dms., t.c.l., same basis lb 42 - —
tanks, same basis lb 39 - —
Glyoxal 30% dms., c.l., works lb 20½ - —
dms., t.c.l. works lb 21¼ - —
tanks works lb 18 - —
Golden seal root, NF, tested, bls lb 2.90 - 3.00
Gramicidin 1 to 5 kilos, f.o.b works gram 4.25 - —
Grapefruit oil, dms. lb 2.60 - 2.75
Graphite amorp powd., bgs., fib dms, ex whse lb .06 - .09½
Cryst. 88-90% powd bgs. fib. dms, ex whse lb .19 - .21½
90-92% powd. bgs., fib dms., ex whse lb .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease white choice all hog, tanks, dlvd lb. .06½ - —
Yellow, tanks, dlvd lb. .05¾ - —
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .12½ - —
dms., t.c.l., same basis lb. .14½ - —
tankcars, same basis lb. .11 - —
Extra winter, strained, dms., c.l., Chicago lb. .15½ - —
dms., t.c.l., same basis lb. .17½ - —
tankcars, same basis lb. .14 - —
Prime, burning, dms., c.l., same basis, Chicago lb. .17½ - —
dms., t.c.l., same basis lb. .19½ - —
tankcars, same basis lb. .16 - —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green

Grindelia robusta herb. bls lb 40 - —
Guaiacol NF crvst. dms. tins lb 2.10 - 2.15
liq., chys., dms lb 2.30 - 2.40
Guaiacwood oil cns lb 65 - .80
Guaiacol carbonate NF VII dms lb 3.40 - 3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt lb .36 - —
bgs., t.c.l. same basis lb .40 - .42
Indust., bgs. c.l., same basis lb .32 - —
Tech., bgs., c.l., same basis lb .30 - —

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum

H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb 1.00 - —
bbls, t.c.l. same basis lb 1.05 - —
Hansa yellow 10 G, bbls., dlvd, E. of Rockies lb 2.45 - —
Hansa G yellow pigment bbls lb 2.20 - —
Hawthorn berries, bgs lb .18 - .20
Heliotropin 100-lb lots, dms. lb 2.60 - 3.40
Hellebore root dom. green, bls lb .70 - .75
Helonias root bls lb 1.50 - —
Hemlock oil, cns lb 2.55 - 3.00
Henbane leaves, bls lb .40 - .45
Heptachlor dms, c.l., t.l., frt. alld., 100% basis lb .96 - —
Heptane indust. tankcars, New Jersey and New York gal .20 - —
Houston Texas gal .1625 - —
Hesperidin, purif., 50 kilos, f.o.b works kilo 19.70 - —
Hesperidin methylchalcone, 50 kilos, f.o.b works kilo 49.25 - —
Hexachlorophene dms., 1-100 lbs lb 1.84 - —
or more lb 1.94 - —
dms to 1,100 lbs
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech. bgs., 20,000-lb lots or more, Perth Amboy or New York City lb .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb .243 - —
bgs smaller lots, same basis lb .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib dms smaller lots, same basis lb .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd New York City and Philadelphia lb .42½ - —
bgs. smaller lots, same basis lb .43½ - .48½
Hexane, industrial, tankcars, New Jersey and New York gal .20 - —
Houston Texas gal .16 - —
1-Hexanol, dms, c.l., works lb .35 - —
dms, t.c.l. works lb .35¾ - —
tanks works lb .33 - —
Hexyl cinnamic aldehyde dms lb 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb .75½ - —
dms, t.c.l. works lb .76 - —
Hexyl salicylate dms. lb 1.70 - 1.75
Hexylene glycol, dms., c.l., dlvd lb .17½ - —
dms., t.c.l., dlvd. lb .19 - —
tanks, dlvd lb .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more dlvd lb 14.00 - —
dms. smaller lots, dlvd. lb 14.50 - —
Homatropine hydrobromide, USP, bots oz 3.25 - —
Homatropine methylbromide, USP, bots oz 3.00 - 3.25
Hoofmeal, 17-18% ammonia bulk, c.l. Chicago unit-ton 6.75 - —
Horehound herb, bls lb .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85%, 240-lb. dms., c.l., works lb 1.28 - —
240-lb. dms., t.c.l., works, lb 1.35 - 1.55
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb 2.93 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd, zone 1 lb .29¼ - —
dms., t.c.l., dlvd, zone 1 lb .29¾ - .30¼
tanks, dlvd, zone 1 lb .27¼ - —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18° cbys., c.l., works 100 lbs 2.50 - —
cbys. t.c.l., dlvd Metropolitan area 100 lbs 2.90 - 3.05
tanks, works, frt equald ton 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
chys. t.c.l. dlvd Metropolitan area 100 lbs 3.15 - —
tanks works frt equald ton 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
chys t.c.l. dlvd Metropolitan area 100 lbs 3.65 - —
tanks, works frt equald ton 35.00 - —
Hydrochloric acid CP, USP, consumers chys, extra, c.l., works lb .15¾ - —
chys t.c.l., same basis lb .17¼ - .17¾
5-pint bots., extra cs., c.l., same basis lb .20¾ - —
lb .20¾ - —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram .95 - —
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram 1.00 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal or 30-gal dms., c.l., t.l., dlvd 100 lbs. 17.25 - —
55-gal dms. t.c.l., t.t.l., dlvd 100 lbs. 18.75 - —
20-gal dms., c.l., t.l., dlvd 100 lbs. 19.00 - —
20-gal., dms., t.c.l., t.t.l., dlvd. 100 lbs. 20.50 - —
tanks, works frt equald 100 lbs. 11.50 - —
Delivered prices apply to all states east of Arizona California Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming in these states add $2.70 per cwt. for drum delivery
Hydroflusilicic acid dms., works, 30% basis lb .07 - —
Hydrofuramide dms., fib. ctns., works lb .30 - .40
50-lb cyls., t.c.l., works lb .55 - .60
Hydrogen chloride anhyd., 50-lb. cyls. t.c.l., works lb .45 - —
Hydrogen cyanide liq., 98%, tanks, works lb .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb .29 - .31
cyls., dlvd. W lb .37 - —
tanks, works lb .16 - —
Hydrogen peroxide 35% dms., c.l., dlvd lb .202 - —
dms., t.c.l., dlvd. lb .211 - —
tanks, dlvd lb .1800 - —
Hydroquinone photo grade, dms., 50-lbs. f.o.b works lb 1.10 - —
Tech. dms. c.l., dlvd. lb .82½ - —
dms t.c.l. dlvd lb .84½ - —
Hydroquinone monomethyl ether, dms., t.l. dlvd lb 2.59 - —
dms. t.t.l., dlvd lb 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb .11 - —
tanks Belle W Va lb .073 - —
Hydroxycitronellal, cns. lb 5.65 - 6.00
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb .74 - —
fib dms 2,000 to 19,999-lb lots, same basis lb .79 - —
fib dms, 100 to 1,999-lb lots, basis lb .83 - —
fib. dms., smaller lots, same lb .93 - —
(Highest viscosity [15,000 cps.] grade is 10c. per lb. higher.)
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz 7.75 - 8.50
Hyoscyamine sulfate, bots oz 7.75 - 8.50
Hypophosphorous acid, purif., 50%, 10-cbys. f.o.b works lb 1.95 - —
NF 50% 10-cbys., same basis lb 1.35 - —

I

Ichthammol NF, dms lb .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo syn.)
Indole, CP, bots lb 13.65 - 15.00
Inositol 50-100 lb dms., 1,000 lbs. or more, dlvd. lb 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs. dlvd lb 5.00 - —
5 lb bots dlvd lb 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb 1.10 - —
Resub., USP, dms., f.o.b. works lb 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb 3.60 - —
Iodoform NF dms, 300-lbs., f.o.b. works lb 4.90 - —
dms, 100-lbs. same basis lb 5.05 - —
a-Ionone cns lb 4.60 - 5.75
b-Ionone cns lb 4.15 - 6.15
Ipecac root, whole, bgs lb 8.00 - 8.50
Powd., bbls., bxs lb 9.50 - 10.00
Irish moss, bleached, prime, bls. lb .30 - .32
Iron blue alkali-resisting, bbls., c.l., dlvd. E lb .60 - —
bbls. t.c.l. ton lots same basis, lb .61 - —
bbls., smaller lots, same basis, lb .62 - —
Dom., reg. bbls., c.l., dlvd. E lb .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb .56 - —
bbls. t.c.l. smaller lots, same basis lb .57 - —
Imp., British reg. bbls. c.l., dlvd. E lb .48 - —
bbls., t.c.l., ton lots, same basis lb .49 - —
bbls., t.c.l., smaller lots, same basis lb .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont. Wyo. Utah, Col and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb .14¾ - —
bgs. t.c.l., works lb .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb .14¼ - —
bgs., t.c.l., works lb .14½ - —
Iron oxide, metallic, brown, bgs., works lb .05½ - —
Iron oxide Persian Gulf, red., bgs., c.l., works lb .08¾ - —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb .14¼ - —
Iron oxide, red nat. 75-85% ferric oxide bgs., c.l., works lb .06¼ - —
bgs., t.c.l., works lb .06½ - —
Iron oxide, Spanish red, bbls., c.l., ex dock lb .05¾ Nom.
bbls., t.c.l., ex dock lb .06 Nom.
bbls., t.c.l., ex whse, New York lb .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb .06¾ - .07
Peruvian type, bgs., t.c.l lb .033 - .036
Iron oxide, yellow, pure, light lemon shade bgs. c.l., works lb .12¼ - —
other shades, same basis lb .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb .27½ - —
dms., t.c.l., same basis lb .29 - —
tanks, same basis lb .25 - —
Isoborneol cns. lb 1.44 - 1.80
Isobornyl acetate, cns. lb .46 - .56
Isobornyl formate, dms lb 1.15 - 1.20
Isobornyl propionate, dms lb 1.20 - 1.25
Isobutyl acetate, perfume grade, cns lb .30 - .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb .15¼ - —
dms., t.c.l., same basis lb .16¾ - —
tanks, same basis lb .12¾ - —
Isobutyl alcohol dms., c.l., dlvd lb .15½ - —
dms., t.c.l., dlvd. lb .17 - —
tanks, dlvd. lb .13 - —
Isobutylene, 99%, tanks, works gal .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb .27½ - —
dms., t.c.l., dlvd. lb .28½ - —
Tech., dms. c.l. dlvd. lb .22 - —
dms., t.c.l., dlvd. lb .23½ - —
tanks, dlvd. lb .19½ - —
Isobutyric acid, dms. c.l., t.l., dlvd, lb .35 - —
dms., t.c.l., t.t.l., same basis lb .36½ - —
t.c. t.t., same basis lb .33 - —
Isobutyronitrile, dms., c.l., dlvd, lb .47½ - —
dms., t.c.l., dlvd lb .48½ - —
tanks, dlvd. lb .45 - —
Isoeugenol, cns. lb 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo 12.00 - —
Isonicotinic acid, 100-lb fib. dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb .20½ - —
dms., t.c.l., dlvd. E. lb .22 - —
tanks, dlvd. E lb .18 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal .16½ - —
Isophorone, dms., c.l., dlvd lb .24½ - —
dms., t.c.l., dlvd lb .25¼ - —
tanks, dlvd. lb .22½ - —
Isophthalic acid, dms., c.l., works, frt. equald lb .19 - —
dms., t.c.l., same basis lb .20 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd, lb .14 - —
dms., t.c.l., same basis lb .15½ - —
tanks, same basis lb .11½ - —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal .58 - —
dms., t.c.l., dlvd. gal .68 - —
tanks, dlvd gal .42 - —
95%, c.l., dms., dlvd gal .60 - —
dms., t.c.l., dlvd. gal .70 - —
tanks, dlvd. gal .44 - —
Anhyd., c.l., dlvd gal .62 - —
dms., t.c.l., dlvd. gal .72 - —
tanks, dlvd. gal .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb .09¼ - —
dms., t.c.l., dlvd. lb .11 - —
tanks, dlvd lb .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works lb 1.00 - —
dms., t.c.l., works lb 1.05 - 1.25
tanks, works lb .99 - —
Isopropylamine (see Mono, Di, or Tri-)
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb .75 - —
450-lb. fib. dms., t.c.l., works lb .80 - .90
Isoquinoline, dms., works lb .65 - 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb .39½ - —
bgs., t.c.l., same basis lb .41 - .43
Tech., bgs., c.l., same basis lb .34½ - —
bgs., 500-lbs. same basis lb .36 - —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls. same basis lb 2.75 - —
Jalap root, NF, bls lb .55 - .60
NF, powd., bbls., bxs lb .65 - .70
Japan wax, cs. lb .29 - .31
Juniper berries, bgs. lb .16 - .17
Juniper berry oil, NF, bots. lb 2.90 - 3.75
Twice rectified, bots. lb 3.25 - —
Juniper tar oil, NF, dms. lb .42 - .60
Juniper wood oil, tech. cns. lb .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms lb .10 - .12
NF colloidal 50-lb. bgs lb .15½ - .17½
Karaya gum, No 1, NF, powd., bls lb .48 - .50
No. 2, powd., bbls. lb .43 - .45
No. 3, powd, bbls. lb .37 - .40
Koch acid bbls., frt. alld., 100% basis lb 1.00 - —
Kola nuts, bgs. lb .11 - .12

L

L acid, bbls., works lb 1.25 - —
Lacquer diluent petroleum, 140°F. 200°F b.r., tankcars, New Jersey and New York gal .20 - —
Group 3 gal .15125 - —
Houston, Texas gal .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York gal .20 - —
Group 3 gal .14125 - —
Houston, Texas gal .16 - —
Lactic acid, food processing, 50%, dms., c.l., t.l., dlvd. N.Y., Phila lb .1986 - —
dms., 20 or more, same basis, lb .2036 - —
dms., 5 to 19, same basis lb .2086 - —
dms., 1 to 4, same basis lb .2136 - —
80%, c.l., dms., same basis lb .3336 - —
dms., 20 or more, same basis, lb .3386 - —
dms., 5 to 19, same basis lb .3436 - —
dms., 1 to 4, same basis lb .3486 - —
Plastic grade, 50% c.l., bbls., works lb .2740 - —
bbls., 20 or more, works lb .2790 - —
bbls. 5 to 19 works lb .2840 - —
bbls., 1 to 4, works lb .2890 - —
80%, bbls., c.l., works lb .4625 - —
bbls. 5 to 19, works lb .4725 - —
bbls. 1 to 4, works lb .4775 - —
Tech., 44%, bbls., c.l., works, 100 lbs. 12.45 - —
bbls., t.c.l., works 100 lbs. 12.85 - —
USP, 85%, cbys. lb .85 - —

Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in 6lb. dms., ½c. higher.
ferment, grade, bgs., c.l., works. lb. .08¾- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
6lb. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l., frt. equald lb. .19 - .19¾
Lady's slipper root, bls lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .34 - .38
USP, annyd., cosmetic, 400-lb. dms., works lb. .38 - .30
USP, hydrous, 400-lb dms., works. lb. .29 —
Lard, cash, dms., Chicago lb. .0940- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 - —
Laurel leaf oil, dms, cns lb 9 75 - 12.50
Laurent's acid, bbls lb. .87 - —
Lauric acid, pure, dms lb. .30¼- .32¾
bags lb. .28¾- .31¼
tanks lb. .27¾- —
Lauryl alcohol, bots lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65¼- —
dms., t.t.l., works lb .66 - —
Lavandin oil, 22-24%, dms. lb. 1.15 - —
Abrial, dms. lb. 1.20 - —
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb 1.85 - 4.00
40-42% ester, cns. lb. 3.50 - 3.65
Spike, Spanish, cns lb. 1.75 - 2.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd. bbls lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity frt. alld on $150 or more lb. .30½- —
1-lb bgs. same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, 400-lb. fib. dms lb. .56 - —
Lead iodide, NF, v jars lb. 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 - —
Lead metal, prime, pigs, New York lb. .11 - —
St. Louis lb. .1080- —
Lead monosilicate, bgs., c.l., works, frt equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 15% Pb., dms., dlvd lb. .19½- —
24% Pb. dms., dlvd. lb. .24¼- —
Solid, 47% Pb., dms. dlvd lb .31¾- —
Lead nitrate, tech., cryst., 400-lb. fib. dms lb. .2675- —
Lead orthosilicate gel., 50-60% PbO, dms. works lb. .29¾- .34½
Lead peroxide, tech powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works, lb. .41 - —
Lead, red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. equald, lb. .1375- —
bbls. l.c.l., same basis lb. .1475- —
97% Pb_3O_4, bbls., c.l., same basis lb. .1395- —
bbls., l.c.l., same basis lb. .1495- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1410- —
bbls. l.c.l., same basis lb. .1510- —
Lead, resinate precip., 23% Pb, dms., lb. .49 - —
Lead salicylate, normal dms. works lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms lb. .21¼- —
Solid, 30% Pb, dms lb. .26¾- —
Lead white, basic carbonate, bgs., c.l. shipt pt., frt. alld lb. .18 - —
bgs. l.c.l. same basis lb. .19 - —
Basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
Lecithin, edible, tech., bleached, non-ret, dms., c.l., works, lb. .14 - .15
non-ret dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo. 14.20 - —
Lemon oil, USP, Calif., cns., dms. lb. 2.45 - 3.75
Messina, cns lb. 4.00 - 6.50
Lemongrass oil, cns., dms lb. 2.60 - 2.75
dl-Leucine, dms., 1 kilo, works kilo. 50.00 - —
Licorice root, gran bls lb. 13 — —
Powd. bls lb 15 .16
Whole bls lb .09 .10
Lignaloe wood oil, Mexican, cns lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l. 50,000 lbs. works, E ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs. c.l. same basis ton. 18.25 - —
For New York delivery add $6.29 freight charge
Lime oil, dist., Mexican, dms lb. 5.50 6.00
West Indian, dms lb. 5.50 6.00
Expressed, West Indian, dms lb. 6.50 7.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool ex bois de rose oil, dms lb 2.45 4.25
Syn., 98-100% dms., works lb 2.40 2.75
Linalyl acetate ex bois de rose, 90-92%, dms lb 2.65 4.50
96-98% dms lb 3.25 —
Syn., 98-100% dms., works lb. 2.75 - —
Lindane, 25% formulation, to distributors, dms., frt. alld. lb. 1.35 - 1.50
99%, tech, to formulators, 250-lb. dms., 5,000 lbs., dlvd lb. 2.13 - —
100-lb dms. 5,000-lbs. dlvd.lb. 2.15 - —
250-lb dms. less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb dms. less than 5,000-lbs. dlvd lb 2.20 - —
Linden flowers, with leaves, bls lb. .35 .40
Without leaves, bls. lb. .42 - .45

Linseed meal, expeller, 32%, bulk, Minneapolis, mills ton. 53.90 - —
Extracted, 34%, bulk, same basis, ton. 49.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1700- —
dms., l.c.l., New York lb. .1790- .1840
tanks, f.o.b. Minneapolis lb. .1340- —
tanks, New York lb. .1448- —
tankwagon, New York lb. .1473- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, dist., dms. lb. .2075- .2325
Water white, dms. lb. .2425- .2675
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .1325- —
bbls., l.c.l., same basis lb. .1425- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 - 39.00
Lithium benzoate, dms. lb. 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb 2.60 - —
Lithium carbonate, NF, dms., ton lots lb. .58 - —
dms., 1,999 lbs. or less lb. .64 - —
Tech., dms., ton lots lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., divd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis lb. .98 - .99
Lithium citrate, NF, dms., ton lots, lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, divd lb. 1.73 - —
bbls., ton lots and more, divd lb. 1.85 - —
bbls., less ton lots, divd lb. 1.90 - —
Lithium hydride, powd., dms., 500-lbs. lots or more, works. lb. 9.50 - —

Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .60 - —
dms., l.c.l., frt. alld lb. .64 - —
Lithium manganite, dms., works lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb. 1.15 - 1.25
Lithium salicylate, dms. lb. 1.60 1.70
Lithium silicate, dms., works lb. 1.10 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. 1.03 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.65 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord, bgs., c.l., divd E. lb. .06½- —
bgs., l.c.l., divd. E lb. .09½- —
Titanated (high-strength), bgs., c.l., divd lb. .11 - —
bgs., l.c.l. divd. lb. .12 - —
Lobelia herb, bls lb. .95 - 1.10
Lobeline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd., bgs. lb. .33 - .40
Lycododium, cs. lb. 2.50 - 3.00
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw No. 1, bls lb. 1.35 - —
No. 2, whole, bls lb. 1.25 - —
siftings, bls. lb. 1.15 - —
Mace oil, dist., cns., dms lb 9.00 - 11.00
Magnesia, calcined, tech, bgs., ctns., frt equald lb. 25¼ 20½
Tech, syn., rubber grade, light, bgs., c.l., frt. equald lb .28¼ .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs. t.c.l., frt equald lb 28¾ —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs., c.l., f.o.b Lunning, Nev ton 39.50 - —
91%, bgs., c.l., same basis ton. 49.50 - —
95%, bgs., c.l, same basis ton 59.00 - —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs. lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton 86.25 - —
Deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton. 46.00 - —
Magnesium bromide, 50-lb. dm., f.o.b. works lb. 1.15 - —

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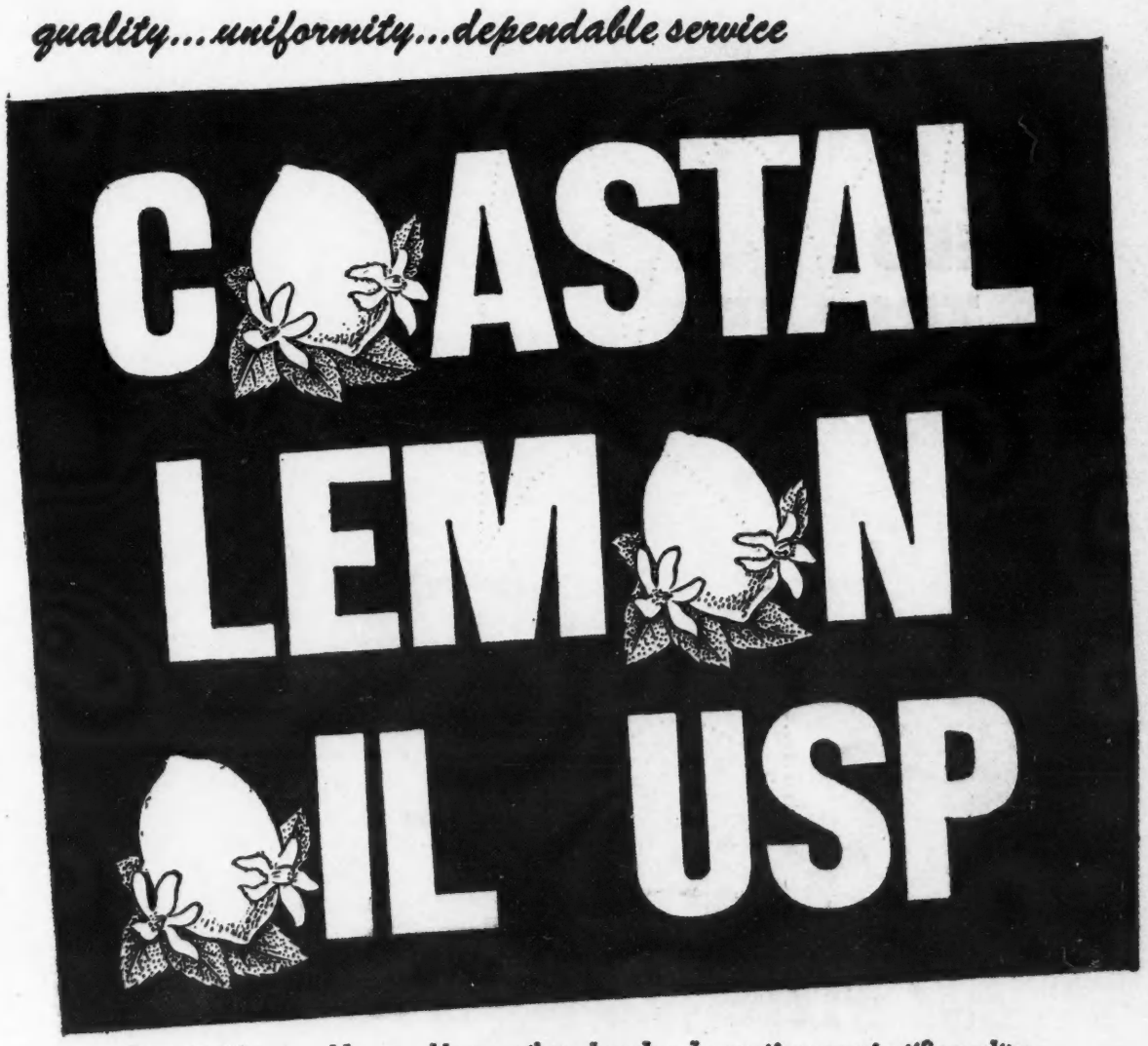

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Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs. l.c.l. frt equald lb .13½- .14
USP, bgs., c.l., frt. equald... lb. .13½- —
bgs. t.l., frt equald lb .14 —
bgs. l.c.l. frt equald lb .15 16
. Above prices are quoted f.o.b. works, freight equald.. with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works lb. .12¾- —
dms. t.c.l., works lb .14 .15
hydrous, 99%, flake, bgs., c.l., works ton.60.00 —
bgs., l.c.l., works ton.75.00 -100.00
Magnesium gluconate 100-lb dm., f.o.b. works. E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .34½- .35½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.t.l., frt alld. lb. .23½- —
tanks, frt alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, same basis lb. .50 - —
Magnesium nitrate, cryst., dms., works lb. .20 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls. lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs. l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 3.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, 5lb. dms., 5,000-lb. lots lb. .38 - —
5lb. dms., 1,000-lb. lots lb. .40 - —
5lb. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher.
Malachite green, straight, FTA, bbls., works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald lb. .24 - —
dms., l.c.l., frt. equald lb. .25½- —
tanks, frt equald lb .22½- —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls. lb. .42 - —
Manganese acetate, dms., dlvd. lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton.132.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd. lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.82 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34½- —
dms., ton lots, dlvd. E lb. .37 - —
dms., smaller lots, dlvd E. lb. .39 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .26¼- —
Manganese resinate, fused, 3½% Mn, dms lb. .29¼- —
Precip., 6½-7% Mn, dms. lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S., E ton.86.50 - —
bgs., l.c.l., dlvd. S., E. ton.93.50 - —
Manganese tallate 6%, dms. lb. .36½- —
Manila copal gum, C, bgs. lb. .28 - .29
DBB, bgs. lb. .24½- .28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 .24
WS, bgs lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 —
fib. dms., to ton lots, works lb. .62 —
fib. dms., single dm., works lb. .65 —
Marine pitch, dms lb. .04¼ .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 —
Menadione, USP bots. gram. .044 .05
Menhaden oil crude, tanks, works, Atl. & Gulf ports lb. .06¾- —
Menthol, nat USP, Brazilian, large crystals, cs lb. 7.35 - 7.60
Nat., USP Brazilian, regular crystals, cs lb. 7.25 - 7.50
Japanese, cs lb. 10.00 -10.50
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst. dms., 100 lbs., f.o.b works lb 4.03 - —
USP, gran or powd., 50-lb dm., 100 lbs., f.o.b works lb. 3.78 - —
Mercuric cyanide, NF VIII powd., fib dms lb 3.84 - —
Mercuric iodide, red, NF, 100-lb. dm. f.o.b. works lb 6.97 - —
Mercuric oxide, red, NF IX 50-lb. dm. 100 lbs. f.o.b works. lb. 4.73 - —
tech., 50-lb dm. 100 lbs., same basis lb 4.52 - —
yellow, NF, 50-lb. dm., 100 lbs., same basis. lb. 4.89 - —
tech., dms. 100 lbs lb 4.35 - —
25-lb. fib dm lb 4.38 - —
Mercurous chloride (see Calomel)
Mercury, ammoniated (see White precipitate, USP XV)
Mercury metal, 76 lbs. per flask, net-flask 200.00 -202.00
Mesityl oxide, dms., c.l., dlvd lb .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline)
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine)
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms. truckloads frt equald lb .42½- —
dms. smaller lots, frt equald. lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat, denaturing grade, tanks, frt alld gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min. dlvd gal. .51½- —
dms. l.c.l. dlvd gal. .61½- —
Syn., tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal min., dlvd gal. .30 - —
tankwagon, 4,000 gal min., f.o.b terminal gal. .29 - —
Syn., zone 2, dms., c.l., t.l., min., frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd. Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld. lb 1.10 - —
dms., t.t.l., same basis lb 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb or more lb. 3.50 - —
Feed grade, 98% fib dms. same basis lb. 1.43 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., t.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd zone 1 lb. .23½- —
non-ret. dms., t.c.l., same basis. lb. .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal. .62½- —
Syn., dms., c.l., frt. alld. E. gal. .66 - —
dms., t.c.l., frt. alld. E. gal. .76 - —
tanks, frt alld. E. gal. .51 —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., t.t.l., dlvd lb. .36¼- —
tanks, dlvd. lb. .33¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 - —
dms., t.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., t.c.l., same basis lb. 2.00 - —
N-Methylaniline, tech., tanks, frt. alld lb. .60 - —
Methylanthranilate, cns. lb. 2.20 - 2.70
Methyl benzoate, cns., dms. lb. .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs. lb. .73 - .79

Every drum that bears your company name carries more than your product. Pride, reputation, prestige and customer good will are riding along, too. That's why you should insist on Tri-Sure Drum Closures *all the way* — Tri-Sure Flange, Tri-Sure Plug, and Tri-Sure Cap-Seal. Tri-Sure is your insurance that the contents are perfectly safe from leakage, contamination, tampering and substitution. The recipient knows, when he sees a Tri-Sure Closure, that the contents are free from impurities and in the quantity specified. Remember this — unless you have *all* genuine Tri-Sure components you stand to lose everything you hoped to gain by specifying Tri-Sure in the first place. Insist on Tri-Sure.

AMERICAN FLANGE & MANUFACTURING CO., INC. • 30 Rockefeller Plaza, New York 20, New York

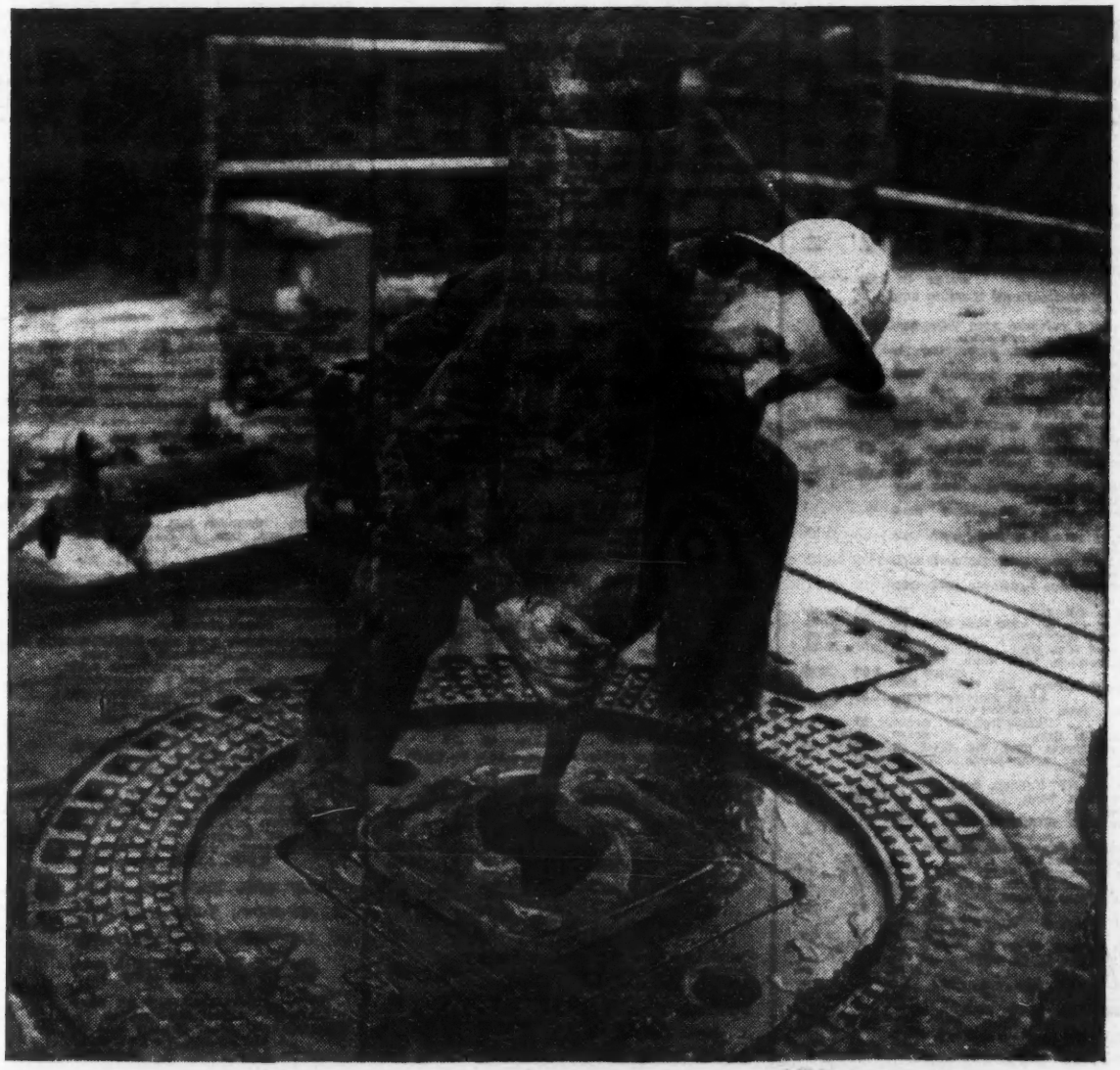
Factories: Chicago, Ill. • Linden, N.J. • Australian Branch: Villawood, N.S.W. • Subsidiaries—Canada: Tri-Sure Products Limited, St. Catherines, Ontario • Brazil: Tri-Sure S/A Industria E Comercio, Sao Paulo • Mexico: Compania Mexicana Tri-Sure S/A, Naucalpan, E. De Mexico • Argentina: Tri-Sure Argentina S.R.L., Buenos Aires.

Methyl cellulose, special viz., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .92 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 • —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 • —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 • —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust., cyls., frt. equald lb. .22½- —
tanks, multi-unit, same basis, lb. .16½- —
tanks, single unit, same basis, lb. .12¾- —
Refrigerator mfgs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. .67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, ens lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
3-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 • —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 • —
Methyl formate, refd., dms lb. .35 • .40
Tech., non-ret. dms., any quantity, works lb. .10 • —
tanks, works lb. .07 • —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .36 • —
100-lb. multiwall paper bgs., t.l., min 23,000 lbs., works, lb. .27 • —
100-lb multiwall paper bgs., l.t.l., works lb. .28 • —
Methyl heptin carbonate, bots lb. 27.25 • 29.00
Methyl p-hydroxybenzoate, fib dms, lb. 1.90 • 2.00
Methyl ionone, standard, ens., dms, lb. 3.40 • 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 • —
dms., l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 • —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald. with Belle, W Va lb. .31 • —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 • —
Methyl naphthyl ketone, cryst., cns lb. 2.45 • 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80%, dms., frt. alld E lb. .84 • —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb fib dms lb. 6.90 • —
Methyl salicylate, dms., t.l., alld lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
3-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 • —
5-39 dm lots, same basis lb. 1.37 • —
tanks, same basis lb. 1.27 • —
Methyl violet toner, molybdated, PMA bbls., dlvd. E. of Rockies lb. 2.95 • —
Tungstated, PTMA, bbls., same basis lb. 4.35 • —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, NF, crystals, 100-lbs., frt. equald lb. 4.10 • —
Methylene chloride, tech., straight or assorted dms. c.l. or t.l., dlvd lb. .12¼- —
dms. l.c.l., t.l. dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene, 32°C., m.p., dms, works lb .90 —
Methylpentanediol (see Hexylene glycol)
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5)
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 • —
roofing, 20 to 80 mesh, works lb. .03 • —
wet-grd., biotite, bgs., c.l., works, frt. alld.E lb. .06½- —
bgs., l.c.l., ex-whse. lb. .07½- —
paint or lacq., bgs., c.l., 325 mesh, works, frt alld E. lb. .08¼- —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 • —
wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 • —
bgs., l.c.l., ex-whse, or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l. works, frt. alld.E lb. .08¾- —
bgs., ex-whse or frt. alld E. lb. .09 • —
white, 5-10 microns, bgs., c.l., works, frt alld E lb. .08¼ —
Mica, wet-grd W. of Miss ½c. higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 • .11
laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs, works lb. .0160- .0673
Mineral oil, white tech, 50-65 vis., non-ret dms., c.l., f.o.b. refy gal. .70 • —
non-ret. dms., l.c.l., same basis gal. .73 • —
tankcars, refy. gal. .54 • —
65-75 vis., non-ret. dms., c.l., same basis gal. .70½- —
non-ret. dms., l.c.l., same basis gal. .75½- —
tankcars, refy. gal. .54½- —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .71 • —
non-ret. dms., l.c.l., same basis gal. .76 • —
tankcars, refy. gal. .55 • —
135-138 vis., non-ret. dms., c.l., same basis gal. .77 • —
non-ret. dms., l.c.l., same basis gal. .82 • —
tankcars, refy. gal. .61 • —
145-155 vis., non-ret. dms., c.l., same basis gal. .83 • —
non-ret. dms., l.c.l., same basis gal. .88 • —
tankcars, refy. gal. .67 • —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .83 • —
non-ret. dms., l.c.l., same basis gal. .90 • —
tankcars, same basis gal. .69 • —
200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .875 • .90
non-ret. dms., l.c.l., same basis gal. .925 • —
tankcars, refy. gal. .69 • .715

Mineral oil, USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy. gal. .92½- —
non-ret. dms., l.c.l. gal. .97½- —
tankcars, refy. gal. .76½- —
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for l.c.l.).
Mineral orange, American, bbls., c.l., works lb. .16 • —
bbls., l.c.l., same basis lb. .17 • —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York gal. .305 • —
Houston, Texas gal. .25 • —
regular, tankcars, New Jersey and New York gal. .18 • —
Group 3 gal. .13875 —
Houston, Texas gal. .145 • —
140 F. flash, New York, New Jersey at terminal gal. .205 • —
Houston Texas gal. .17 • —
Mink oil, dms lb. 3.75 • —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 • —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .14½- —
tanks, New York gal. .15½- .16
Molybdated orange, bbls. lb. .49 • —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works kilo 9.13 • —
Molybdenum trioxide, purif., dms., works lb. 1.15 • —
Tech., chemical, dms., works, basis Mo content lb. 1.48 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 • —
Molybdic acid, 84%, dms., works. lb. 1.03 • 1.15

Monoallylamine, dms., c.l., dlvd lb. .965 • —
dms., c.l., dlvd. lb. .995 • —
tanks, dlvd lb. .96 • —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .37½- —
dms., l.c.l., same basis lb. .39 • —
tanks, same basis lb. .35 • —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .53 • —
dms., l.c.l., works lb. .56 • —
tanks, works lb. .54 • —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine, dms., c.l., dlvd. E lb. .37½- —
dms., l.c.l., same basis lb. .39 • —
tanks, same basis lb. .35 • —
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 • —
tanks, dlvd. E., 100% basis lb. .35 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).

Monoisopropanolamine, dms., c.l., dlvd. E lb. 27½- —
dms., l.c.l., same basis lb 29 —
tanks, same basis lb 25 —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb .33½- —
dms., l.c.l., same basis lb 35 —
tanks, same basis lb 31 • —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb .30 • —
tanks, 100% basis lb .28 • —
30-35% soln., dms., c.l., frt. equald. 100% basis lb .30 —
Monomethylamine, 30-35% soln., dms., l.c.l., frt. equald, 100% basis lb. .36½- —
tanks, frt. equald. 100% basis, lb. .26 —
40% soln., dms. frt equald., 100% basis lb .33 • —
dms., t.c.l., frt. equald. 100% basis lb .33½- —
tanks, frt. equald, 100% basis lb .26 —
Monopentaerythritol, tech. bgs., c.l., dlvd lb. .29 • —
bgs., l.c.l. lb. .30 • —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb 3.05 • —
dms. 100-lb lots same basis lb 3.25 • —
Monosodium glutamate, dms., dlvd. lb. 1.07 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 .28
Imp., crude, Bohemian, bgs. lb. .25 • .26
German, bgs. lb. .25 • .26



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You benefit from the careful, painstaking controls at Enjay which start when the crude leaves the ground and do not end until the finished chemical is delivered to your plant. Enjay methyl ethyl ketone comes to you *only* after it has passed strict specification tests using modern test methods, including gas chromatography. You'll find our specs among the highest in the industry:

Purity (wt per cent) min.	99.3
Specific Gravity (20/20°C) min.	0.805
max.	0.807
Acidity (as acetic acid—wt per cent) max.	0.002
Color (Hazen) max.	10.0
Non-volatile Matter (mg/100 ml) max.	2.0
Distillation °C	
Initial min.	78.7
Dry Point max.	80.7
Water (wt per cent)	0.2
Residual Odor	None
Appearance	Clear and free of suspended matter

Users of Enjay MEK are assured of dependable supply from modern facilities; rapid delivery from strategically located supply points; and technical service that is unsurpassed in the industry. Let us show you how these assets can make a difference to you. Write to Enjay, 15 West 51st Street, New York 19, New York.

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY CHEMICALS

Morphine, cns., 100-oz., f.o.b. works oz. 12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b works oz 9.90 - —
Morphine hydrochloride NF, cns., 100-oz., f.o.b works oz 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b works oz 9.90 - —
Morpholine, dms., c.l., divd. E lb .55¼- —
dms., l.c.l., divd. E lb .56¾- —
tanks, divd E lb .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib dms., 100-lb lots lb 4.40 4.90
cns., 25-lb lots lb 4.50 5.00
Ketone fib. dms., 100-lb lots lb 4.60 5.10
cns., 25-lb lots lb 4.70 5.20
Xylol, fib. dms., 100-lb lots lb 1.26 —
cns. 25-lb lots lb 1.40 -
Mustard seed, Danish, yellow, bgs. lb .08 - —
Montana, yellow, bgs lb 10½- —
Oriental, bgs. lb .09 - —
Mustard, oil, syn., bots. lb. 1.60 1.85
Myristic acid, bgs lb. .23¼- .25¾
tanks lb. .22¼- —
Myrrh gum, cs. lb. .65 .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, dom., 78°, tanks, f.o.b., frt. equald lb. .06¼- .06½
Refd. indust., chipped, crushed, bgs., frt. equald lb. .14½- —
tanks, same basis lb. .11¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs. 50 lbs. c.l., same basis. lb. .15¾- —
1-lb pkgs. c.l., same basis. lb. .18½- —
a-Naphthol, dms., frt. alld lb. 1.02 - —
b-Naphthol, tech. flake bbls., c.l., works lb. .34 - —
bbls. l.c.l., works lb .36 - —
Naphthol, ITR, red toner, bbls., works lb 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms., frt. alld lb. .52 - —
b-Naphthylamine tech. flake, bbls., works lb 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib dms. lb. 8.50 —
Neatsfoot oil, 15° cold test, dms lb .29 Nom.
20° cold test dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP dms., frt. adjusted lb. 7.00 8.00
Neomycin sulfate, fib dms., 1-kilo basis activity gram. .18 - —
fib. dms. 100-999 gram lots, basis activity gram. .25 - —
Tech., fib dms gram .13½- —
Neopentylglycol, dms., c.l., divd lb .32 - —
dms. l.c.l. same basis lb .33 - —
Neroli, dms lb 4.75 —
Neroli oil, NF, French, bots. lb. 425.00 -575.00
Tunisian, bots. lb. 400.00 — —
Nerolin, cns lb. 2.45 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.50 - —
Niacinamide (see Nicotinamide).
Nickel acetate bbls. divd lb. .68½- .75½
Nickel carbonate bbls., divd lb .78¼- .85¼
Nickel chloride, bbls. divd lb .37 .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 .73
Nickel metal, electro cathodes, cs., works lb .74 —
Nickel nitrate, dms., frt. alld lb .31½- .33½
Nickel oxide, black, bbls. lb. .85 —
Green, bbls lb. .84 —
Nickel sulfate, bgs., c.l., divd lb. .28 —
bgs., l.c.l., divd. lb. .28½- .36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., divd kilo. 5.75 6.50
dms. less than 100 kilos. divd. kilo. 6.25 7.00
Nicotinamide hydrochloride, 50-kilo dms., divd kilo. 6.50 7.50
Nicotine sulfate 40%, dealers, 50-lb. dms frt alld lb 1.20 - —
40% manufacturers, 500-lb. dms., frt alld lb 1.05 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb 10¼- —
Nikethamide, cbys. lb 5.00 —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs 5.75 —
cbys., t.l., works E 100 lbs 6.05 6.85
38° Be., cbys. c.l., works E. 100 lbs 6.25 —
cbys., t.l., works E 100 lbs 6.55 7.35
40° Be., cbys., c.l., works E 100 lbs. 6.75 - —
cbys., t.l., works E 100 lbs 7.05 7.85
42° Be., cbys., c.l. works E. 100 lbs 7.25 —
cbys., t.l., works E 100 lbs 7.55 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 - —
Nitric acid CP, NF consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, l.c.l. works. lb. .20 - —
5-pint bots. extra cs., c.l. same basis lb .22½- —
5-pint bots. extra cs., l.c.l., same basis lb .24 .25
dms. frt alld lb .99 —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste, dms., frt. alld., 100% basis. 1.10 - —
o-Nitroaniline, flaked, dms. t.l., frt. alld lb. .49 - —
dms. t.l., frt alld lb .51 - —
o-Nitroaniline orange toner, kgs. lb. 1.50 - —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., divd lb. .44¼- —
dms., l.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .13 — —
dms., l.c.l., frt. alld. lb. .14 - —
tanks, frt. alld lb. .12 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .39½- —
bbls., l.c.l., same basis lb. .42½- —
18-25 cps., bbls., c.l., same basis. lb. .41½- —
bbls., l.c.l., same basis lb. .44½- —
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .44½- .47½
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .44 - —
bbls., l.c.l., same basis lb. .47 - —
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .46 - —
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene dms. lb. .26 - .27
2-Nitro-p-cresol tech. dms., divd lb. .88 —
Nitroethane, dms., c.l., divd. E lb. .28½- —
dms., l.c.l., divd. E lb. .30 - —
tanks, divd E lb. .26 - —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, direct application, works, f.o.b. works unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton. 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b Hopewell, Va lb. .065 - —
Cyls., t.l., min 5 tons, same basis lb. .07½- —
Cyls., l.c.l., t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works, unit-ton 4.50 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works, unit-ton. 3.50 —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b producers' works, Chicago.)
Nitromethane, dms., t.l., divd. E lb. .26 - —
dms., l.t.l., divd. E lb. .27½- —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt alld. lb. .45 - —
dms. l.c.l. frt alld lb. .47 - —
1-Nitropropane, dms. c.l., frt. alld. E. of Rockies lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanks, same basis lb. .26 - —
1-Nitropropane prices West of Rockies are 1c. per lb higher.
2-Nitropropane, dms. c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
m-Nitrotoluene tech. dms. frt. alld. lb. .50 - —
o-Nitrotoluene, dms. c.l., frt. alld lb .15 - —
dms., l.c.l., frt alld. lb. .16 - —
tanks, frt. alld lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms. l.c.l. works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms. l.c.l. works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms. c.l. frt. alld. lb. .22½- —
dms., l.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 —
Nonylphenol prices on shipments to Western States are 2c. higher.
Noscapine, cns. oz. 8.00 - —
Nutmegs, East Indian, whole, bgs. lb. 1.26 - —
West Indian, bgs lb. 1.00 - —
Nutmeg oil, USP dist., East Indian, cns lb. 8.00 -12.00
West Indian, cns. lb 9.00 -12.00
Nux vomica, bls. lb. .20 —
Powd., bbls., bxs. lb. .20 .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .44 - .47
Octane, indust., tanks, Bayonne, N.J gal. .20 —
1-Octanol, tech., dms. c.l., divd., Zone 1 lb. .41½- —
dms., l.c.l., divd. Zone 1 lb. .43½- .44½
tanks, divd. Zone 1 lb. .37½- —
Octyl alcohol, perfumers grade, bots. lb. 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
n-Octyl-decyl alcohol blend, tanks, divd lb. .19 - —
tert-Octylamine, dms. c.l. t.l., t.o.b. works lb .54½- —
dms. l.c.l. same basis lb 55 —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l., works lb .23 —
tanks, works lb .21½- —
Octylphenol in dms., 1lc. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liquid, dms lb. .15¾- .16¼
tanks lb. .14¼- —
Oleic acid, dbl.-dist. (white), dms. lb. .19 - .21½
tanks lb. .16½- —
S. D., dms. lb. .18 - .20½
tanks lb. .15½- —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 .20
Tears, cs. lb .22 .30
Olibanum oil, bots lb. 5.00 7.65
Extra fine bots lb 8.00 9.50
Olive oil, edible, dms., spot, ex whse. gal. 2.35 - 2.40
Olivine, crude, works ton. 12.00 — —
20 mesh, works ton. 15.00 - —
100 mesh works ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis. oz. 21.65 - —
powd., cns., 50 lbs., same basis. oz. 21.68 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms lb. .40 - .45
Messina, cns. lb. 3.25 5.00
West Indian, bitter, cns., dms lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb. .28 .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb 1.80 2.30
Orris root, Florentine, bls lb .55 - —
powd., bbls., bxs lb. 65 - —
Verona, bls lb. 35 - —
powd., bbls., bxs lb. 45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitro aniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Ouabain, USP, bots. gram 3.00 4.00
Ouricury wax, crude, bgs lb. .52 - —
Refd., pure, bgs lb. .54 - .56
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb higher.
o-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb 1.03 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb. 4.92 5.17

P

Palm oil, clarif., dms lb. .14¾- .15¾
tanks, New York lb. .12 - —
Palm oil acid, double dist. dms. lb. .16 - .18½
tanks lb. .13½- —
single dist., dms lb. .15½- .18
tanks lb. .13 - —
Palmarosa oil, cns lb. 4.90 6.00
Papain, powd., bots. lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Bulgarian, bgs lb. .32 - —
Hungarian, bgs. lb. .33 - —
Spanish, bgs lb. .30 - —
Yugoslavian, bgs. lb. .38 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
Fully refd., 122°-124°F., ASTM, lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91% flake, bgs., c.l., frt alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l lb. .19 - —
fib dms., 1,000-lb lots lb. .20 - —
fib dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. E lb. .14 - —
55-gal. dms., l.c.l., divd. E lb. .15½- —
tanks, divd. E lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion ethyl, dms, frt alld lb .84 —
Parathion prices 2c. per lb higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls lb 35 40
Patchouli oil, imp., cns. lb. 5.60 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., divd E of Rockies lb. 1.00 —
Peacock blue price 1c higher W of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b. mills ton. 66.50 - —
solvent, same basis tons. 64.50 - —
Peanut oil, crude, tanks, f.o.b. mills. lb. .15¼- —
Refd., dms. lb. .20½- .20¾
tanks lb. .18½- —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt. pt. kilo. 4.83 - —
Pelargonic acid, dms., c.l., divd. E lb. .27½- —
ton lots, same basis lb. .28½- —
tanks, same basis lb. .25 - —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .018 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil, USP imported, cns. lb. 2.35 - 2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., divd. lb. .29 - —
bgs., l.c.l., divd lb. .30 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust. tanks, Tex refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 —
Pepper, black, Malabar, bgs lb. .47½- —
Lampong, bgs. lb. .47½- —
Red, Funtuas, bgs. lb. .32 - —
Japanese, Hontoka, bgs lb. .29 - —
Santaka, bgs. lb. .31½- —
Sudanese, bgs. lb. .56 - —
White, Muntok, bgs lb. .56½- —
Peppermint leaves, dom., USP, bls., ums lb. No stocks.
imp., USP, dms. lb. .85 - .90
Peppermint oil, nat., dms lb. 4.00 - 4.40
Redist., USP, dms lb. 4.25 - 4.65
Perchloroethylene dms. c.l., or t.l., divd lb. .13½- —
dms., l.c.l., divd. lb. .15¼- —
tanks, divd. lb. .11¼- —
tanktruck, 1,000 gal. min. divd lb .12¼- —
Peri acid, dry bbls., frt alld lb. 1.60 - —
Paste, bbls. frt alld lb. 1.55 - —
Peru balsam, dms lb. 1.15 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.30 —
Petrolatum, NF, cream, dms., c.l., refy. lb. .085 - .08625
dms., l.c.l., divd lb. .11125-.11250
tanks, refy lb. .0625- .06375
NF, extra amber, dms., c.l., refy. lb. .07625- —
dms., l.c.l., divd lb. .1025- —
tanks, refy. lb. .05375- —
NF, soft yellow, dms., c.l., refy lb. .07625- —
dms., l.c.l., divd. lb. .1025- —
tanks, refy. lb. .05375- —
USP, lily white, dms., c.l., refy. lb. .09125-.09675
dms., l.c.l., divd lb. .1175- .1225
tanks, refy lb. .0 875- —
USP, snow white, dms., c.l., refy. lb. .09625- —
dms., l.c.l., divd. lb. .1225- —
tanks, refy. lb. .07375- —
Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms. l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbital, USP, dms., 100-lbs., frt. alld lb. 2.85 - 3.25
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies lb. .17¼- —
non-ret. dms., l.c.l., same basis. lb. .18¼- —
tanks, same basis lb. .15¼- —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17 - —
non-ret. dms., l.c.l., same basis. lb. .18 - —
tanks, same basis lb. .15 - —
39°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18½- —
non-ret. dms., l.c.l. lb. .19½- —
tanks, same basis lb. .16½- —
Phenol, USP, syn., dms., c.l., t.l., frt. alld lb. .19 - —
dms., l.c.l. same basis lb. .21 - —
tanks, same basis lb. .17 - —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb. 1.35 - —
Phenothiazine drench, fib dms., t.l., divd lb. .46 - —
fib. dms., ton lots, divd lb. .49 - —
NF, fib. dms., t.l., divd lb. .45 - —
fib. dms., ton lots, divd lb. .48 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50% bots lb. 2.15 2.35
100%, bots. lb 3.80 4.00
Phenylacetic acid, pure, cryst., cns lb. 1.25 1.75
di-Phenylalanine, dms., 1-kilo kilo. 65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb. lots, divd. E lb. 3.45 - —
fib dms., smaller lots, divd E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., divd. E lb. .50 - —
dms., l.c.l., divd. E lb. .51½- —
tanks, divd. E lb. .47½- —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
l.c.l., l.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .76¼- —
Phenylethyl acetate bots. lb. 1.25 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms lb. 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 —
dms. smaller lots, frt alld lb 1.70 1.85
Phenylethylphenyl acetate bots lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97% 450-lb dms. lb 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, divd E lb. 1.80 - —
fib dms. smaller lots, divd E lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .50

p-Phenylphenol, bgs., c.l., works lb. .38½ - —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¼ - .27
nubs, bgs. lb. .33¼ - .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 .24
Phloroglucinol, comi., fib. dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ref. cyls., works lb. .15½ - —
Phosphate defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, short-ton. 4.989 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 6.438
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.329 - 7.338
76-77% o.p.l., c.l., bulk, same basis short-ton. 8.219 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64
Phosphoric acid, food grade, 75%, cbys. c.l., works, E, frt. equald 100 lbs. 7.00 - —
cbys. l.c.l., same basis 100 lbs. 7.25 7.75
tanks, t.w., works 100 lbs. 5.60 —
80% cbys. c.l. frt equald 100 lbs. 7.85 —
cbys., l.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs. 6.00 —
NF 85% cbys., c.l., works. 100 lbs. 8.50 —
cbys., l.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20¼
dms. l.c.l. works, frt. equald lb. .21½ - —
tanks, works, frt equald, lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½ - —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½ - —
dms., l.c.l. works lb. .14½ - .15¼
Solid, dms., c.l., works lb. .11½ - —
dms., l.c.l., works lb. .12½ - .13¼
Phosphorus pentoxide, dms., c.l., works lb. .1375 - .1475
dms., l.c.l., works lb. .1475 - .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19¼ - —
Phthalimide 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .46 - .48
dms., l.c.l., works, frt. equald lb. .46½ - .49
tanks, same basis lb. .43 - .46
b-Picoline, 98% dms., t.l., works. lb. 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½ - —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., t.o.b., works lb. 1.60 - —
tanks, t.l., same basis lb. 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech., bbls. lb. .50 - —
Pigment green B, kgs. lb. 1.55 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Pilocarpine nitrate, USP, bots., vials, oz. 4.65 - 5.15
Pimento, Jamaican, bgs. lb. .72 - —
Mexican, bgs. lb. .62 - —
Pimento berry oil, NF, dms. lb. 3.75 9.25
Pimento leaf oil, crude, cns lb. 2.50 - 2.60
Pine oil, dest.-dist., dms., t.c.l. works lb. .15 - —
dms., t.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pink root, bls. lb. 2.25 - —
Piperazine, anhyd., dms., c.l., frt. alld. E lb. 1.80 - —
dms., t.c.l., frt. alld. E lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.33 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt alld lb. 1.29 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld lb. .90 - —
dms., 200-900 lbs., frt. alld lb. .93 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.11 - —
Piperidine, dist., 98% min., 3 dms. or more, l.c.l., t.t.l., f.o.b. works lb. 2.65 - —
1-4 dms., same basis lb. 2.70 - —
dms., c.l., t.l., frt. equald lb. 2.50 - —
Piperonyl butoxide, dms., dlvd. E. lb. 4.50 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz. 81.00 -85.00
Pleurisy root, bls. lb. .45 .50
Podophyllum resin, NF, dms. lb. 12.50 -15.50
Poke root, bls. lb. .19 - .22
Polymyxin, bots., bulk, 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs. lb. .33½ - .36
Nubs, bgs. lb. .38 - .44
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .14 - —
Danish, bgs. lb. .14 - —
Polish, bgs. lb. .13 - —
Turkish, bgs. lb. .11 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.23 - —
dms., l.c.l., same basis. 100 lbs. 5.21 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.55 - —
dms., l.c.l., same basis. 100 lbs. 11.05 - —
solid, 88-92%, dms., c.l., works 100 lbs. 9.10 - —
dms., l.c.l., works 100 lbs. 10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
powd., dms. lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½ - .19¼
Potassium bichromate in dms. ½c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb. 16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.
Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 - —
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls., dms lb. .22 - .24
Dom., tech., powd., bbls., dms lb. .21 - .23
Dom., calcinated, bgs., c.l., works. 100 lbs. 8.30 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼ - —
dms., l.c.l., works lb. .13½ - .14½
Powd., dms., c.l., works lb. .12¾ - —
dms., l.c.l., works lb. .14 - .15
works lb. .12¾ - —
NF, cryst., dms., 2,000 lbs. or more, works lb. 16¾ - —
NF, gran., 25-lb. metal dms lb. .36 - —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼ - —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton. 29.00 - —
bgs., c.l., works ton. 34.00 - —
99.3% KCL, bulk, c.l., works. ton. 28.00 - —
bgs., c.l., works lb. 33.00 - —
USP, cryst., dms lb. 33.00 - —
USP, gran., dms lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis. lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, works lb. .42½ - —
dms., 2,000-19,999-lb. lots, works. lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½ - —
dms., smaller lots lb. .25 - —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works lb. .31 - —
Potassium fluoride, dms., works E lb. .36 - .37
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb. 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots lb. .33¼ - .36
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Potassium iodide, USP cryst., gran., 250-lb. dm., f.o.b. works lb. 1.53 - —

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Potassium Manure Salt—Riboflavin-5-Phosphate Sodium

Potassium manure salt, min. 20% K_2O, bulk, c.l., works, unit-ton	.17	-	.1765
Potassium metabisulfite, gran, dms., lb	.16	-	—
Powd., dms, lb	.27	-	—
Potassium muriate, standard, bulk, c.l., works unit-ton, bagged 60% minimum K_2O, same basis ton	26.60-		27.80
Gran., bulk, c.l., works unit-ton, bagged 60% minimum K_2O, same basis ton	28.10		30.10
Inside prices apply to material contracted for prior to July 1, 1960			
Outside prices apply to material contracted for after that date but also for delivery during the current month			
Potassium nitrate, NF cryst., bbls., 20-ton lots, 100 lbs	17.00		—
bbls., smaller lots, 100 lbs	18.00		19.00
gran., bgs., 20-ton lots, 100 lbs	9.50		—
bgs., smaller lots, 100 lbs	11.00		12.00
powd., bgs., 20-ton lots, 100 lbs	10.50		—
bgs., smaller lots, 100 lbs	12.00		13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works, E, lb	.32	-	—
Potassium pentaborate, gran, dms., c.l., works, ton	219.50	-	—
dms., ton lots, ex whse, 100 lbs	17.48	-	—
dms., smaller lots, ex whse, 100 lbs	18.73		—
Powdered potassium pentaborate $10 per ton higher.			
Potassium perchlorate, dms., c.l., works, lb	.18½-		—
dms., l.c.l., works, lb	.19		.20
Potassium permanganate, coml., kgs., works, lb	.25		.33
USP, dms., works, lb	.29		.35
Potassium pyrophosphate, tetrabasic, dms., works, lb	.1475-		1575
Potassium prussiate red (see Potassium ferrocyanide)			
Potassium prussiate yellow (see Potassium ferro-cyanide)			
Potassium silicate, electrical grade, 30° Be., 1.2.0, dms., c.l., works, 100 lbs	6.50	-	—
dms., l.c.l., 5 dm. lots or more, works, 100 lbs	7.25		7.65
tanks, works, 100 lbs	6.15	-	—
40.5° Be 1:2.1, dms., c.l., works, 100 lbs	5.95	-	—
dms, l.c.l., 5 dm. lots or more, works, 100 lbs	6.70	-	—
tanks, works, 100 lbs	5.60	-	—
Glass grade, bgs., c.l., works, 100 lbs	17.30		-18.00
bgs., l.c.l., works, 100 lbs	17.80	-	—
Soln., 29° Be. 1:2.5, dms., c.l., works, 100 lbs	4.95	-	—
dms., l.c.l., 5-dm. lots or more, works, 100 lbs	5.70	-	—
tanks, works, 100 lbs	4.60	-	—
Potassium silicofluoride, bgs., works, lb	.09½-		.10
Potassium silicofluoride in drums, 0.4c. per lb higher.			
Potassium stannate, dms, frt. alld., lb	.838	-	.900
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works unit-ton	.70½-		.72½
Inside price applies to tonnage contracted for prior to July 1, 1960			
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.			
Potassium sulfate, NF VII, cryst., dms., lb	.31	-	.33
NF VII, gran., 400-lb. dm., lb	.16	-	—
NF VII, powd., 400-lb dm., lb	.17	-	—
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).			
Potassium thiocyanate, NF, cryst., dms., works, lb	.96	-	.98
Tech., dms., works, lb	.77	-	.79
Potassium titanate, ctns., c.l., works, lb	.16¼-		—
ctns., 5-ton lots, works, lb	.16½-		—
ctns., 1-ton lots or less, works, lb	.16¾-		—
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price, ton	13.45	-	—
bulk, works, July forward, ton	14.00	-	—
Potassium-sodium tartrate, NF gran. or powd., 250-lb. dms., c.l., works, E, lb	.42½-		—
250-lb. dms., 5,000-lb. lots, same basis, lb	.43	-	—
250-lb. dms., same basis, lb	.43½-		—
Potassium-titanium fluoride, fib, dms., works, lb	.39	-	.40
Potassium-zirconium flouride, fib, dms., c.l., works, lb	.50	-	—
fib, dms., l.c.l., works, lb	.52½-		.55
Pregnenolone, bots, gram	No prices.		
Pregnenolone acetate, bots., gram	No prices.		
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld., lb	2.10	-	2.25
USP, ampule grade, dms., 1,000-lb. lots, frt. alld., lb	2.40	-	—
dms., 500 lbs., lb	2.45	-	—
dms., 100 lbs., lb	2.50	-	—
Progesterone, USP, bots., gram	No prices.		
Pregnenolone acetate, bots., gram	No prices.		
Propenyl guaethol, dms., lb	24.30		27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works, lb	.47½-		—
dms., l.c.l., t.l., same basis, lb	.48½-		—
tanks, same basis, lb	.45	-	—
Propionic acid, syn., pure, dms., c.l., dlvd., lb	.23¼-		—
dms., l.c.l., dlvd., lb	.24¾-		—
tanks, dlvd., lb	.20¾-		—
n-Propyl acetate, dms., c.l., dlvd., lb	.14¾-		—
dms., l.c.l., dlvd., lb	.16¼-		—
tanks, dlvd., lb	.12¼-		—
n-Propyl alcohol, dms., c.l., dlvd., lb	.14		.15
dms., l.c.l., dlvd., lb	.15½-		.16½
tanks, dlvd., lb	.11½-		.12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works, lb	3.90		4.40
n-Propyl-p-hyroxybenzoate, USP, dms, lb	2.30		2.40
Propyl thiouracil, bots., 50 kilo lots or more, kilo	55.00		—
bots., smaller lots, kilo	55.10		55.30
n-Propylamine, dms., c.l., dlvd, lb	1.24		—
dms., l.c.l., same basis, lb	1.255		—
n-Propylene dichloride, consumers', dms., c.l., dlvd., E, lb	.0845-		—
dms., l.c.l., same basis, lb	.0995-		—
tanks, same basis, lb	.07		—
Propylene dichloride prices in West ie. higher, same basis			
Propylene glycol, indust., dms., c.l., dlvd., E, lb	.15		—
dms., l.c.l., same basis, lb	.16¾-		—
tanks, same basis, lb	.12½-		—
USP, dms., c.l., dlvd., E, lb	.17		—
dms., l.c.l., same basis, lb	.18¾-		—
tanks, same basis, lb	.14½-		—
Propylene glycol methyl ether, dms., c.l., dlvd, lb	.20		—
dms., l.c.l., same basis, lb	.21		—
tanks, same basis, lb	.18½-		—
Propylene oxide, dms., c.l., dlvd, E, lb	.17		—
dms., l.c.l., dlvd, E, lb	.18½-		—
tanks, dlvd, E, lb	.14½-		—
Psyllium seed, black, bgs., lb	.42		.45
Blonde, bgs., lb	.18		.20
Husks, bgs., lb	.42		.45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots, lb	.03½		.04¼
bgs., smaller lots, lb	.03⅞-		—
Imp., Italian, silk-screen, coarse, bgs, ton lots, lb	.06½-		—
fine, bgs, ton lots, lb	.04		—
sun dried, coarse, bgs, ton	60.00		—
fine, bgs, ton	60.00		70.00
Pumpkin seed, bgs, lb	.25		.26
Pyrethrins, syn (see Allethrin).			
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works, lb	.50	-	—
Powd., 1.3% pyrethrins, bgs., ton works, lb	.71	-	—
Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal	9.60		9.80
100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works, gal	45.90		46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works, lb	11.00		11.35
purif, 20%, dms., works, lb	11.00		11.35
Pyridine, denat., dms., c.l., works and frt. equald, gal	2.77	-	—
dms., l.c.l., same basis, gal	2.80	-	—
Refd., 2°, non-ret., dms., c.l., same basis, lb	75½-		—
dms., l.c.l., same basis, lb	.76	-	.76¼
tanks, same basis, lb	.71	-	—
Potassium persulfate, dms., c.l., works, lb	.17½-		—
dms., l.c.l., works, lb	.18		.21
Pyridoxine hydrocnloride, USP 500-gram bots., dms., f.o.b works, kilo	95.00		100.00
Pyrites, Canadian, 48-50% S, mines, long-ton	4.50		5.00
Pyrocatechol (see Catechol)			
Pyrogallic acid, NF (see Pyrogallol).			
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works, lb	3.50	-	—
Pyrogallol, NF 100-lb dms, lb	3.50	-	—
Pyroxylin, USP, bots, lb	9.50	-	—

Q

Quassia chips, lb	.10	-	—
Quicksilver (see Mercury metal)			
Quince seed, bgs, lb	1.75	-	2.00
Quinidine sulfate, USP, 1,000-oz. dm, oz	.78½-		—
Quinine, NF, 1,000-oz. dm., oz	.3750-		—
Quinine bisulfate USP, 1,000-oz. dm., oz	.28		—
Quinine hydrochloride, 1,000-oz dm., oz	.3650-		—
Quinine sulfate, USP, 1,000-oz dm., oz	.3150-		—
Quinoline, dms., c.l., frt. equald, lb	.50¾-		—
dms., l.c.l., same basis, lb	.51¼-		—
tanks, same basis, lb	.50		—

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis, lb	.98	-	—
Powd., dms., c.l., t.l., frt. alld, 100% basis, lb	1.08	-	—
Rapeseed oil, dms., lb	.19	-	.19¼
tanks, lb	.17½-		—
Rare earth oxalate, NF, 45-50%, bgs., works, lb	1.15		—
Rauwolfia serpentina, root, powd., bbls., dms, lb	1.00		1.30
Red carmine, No. 40 (see Carmine).			
Red oil (see Oleic acid)			

RED PIGMENTS

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).			
Red toner, Lake C, alizarine, bbls., works, lb	1.30	-	—
Reserpine, cryst., bots, gram	1.25	-	—
Resorcinol, tech. grade, bgs., c.l., works, frt. equald, lb	77½-		—
bgs., l.c.l., same basis, lb	.78½-		—
Resorcinol in dms. 1c. per lb more.			
Resorcinol monoacetate, NF, dms., lb	2.50	-	—
USP, powd., dms., works, lb	2.85	-	—
Rhatany root, bgs, lb	.14		.16
Rhodamine red toner, molybdated, PMA, kgs., works, lb	6.00		—
Tungstated, PTMA, works, kgs, lb	6.60		—
Rhodinol, 5-lb. cans, lb	42.00		51.00
Synthetic, lb	14.00		16.00
Rhubarb root, India, whole, bgs, lb	.25		—
powd., bgs, lb	.35		—
Riboflavin, USP, fib, dms, more, lb	46.00	-	—
Riboflavin-5-phosphate-sodium, fib, dms, kilo	104.70	-	—

Potassium manure salt—Riboflavin-5-Phosphate Sodium

Potassium metabisulfite—Propylene glycol methyl ether

Potassium muriate—Propylene oxide

Potassium nitrate—Pyrethrum liquid

Potassium oxalate—Pyridine

Potassium pentaborate—Pyridoxine hydrochloride

Potassium perchlorate—Pyrites

Potassium permanganate—Pyroxylin

Potassium pyrophosphate—Quassia chips

Potassium silicate—Quinine sulfate

Potassium silicofluoride—Quinoline

Potassium stannate—Rhubarb root

Potassium sulfate—Riboflavin-5-phosphate-sodium

Potassium sulfocyanate—Rhodinol

Potassium thiocyanate—Rhodamine red toner

Potassium titanate—Rhatany root

Potassium-magnesium sulfate—Resorcinol monoacetate

Potassium-sodium tartrate—Resorcinol

Potassium-titanium fluoride—Rare earth oxalate

Potassium-zirconium flouride—Rapeseed oil

Pregnenolone—Red toner

Pregnenolone acetate—Red precipitate

Procaine hydrochloride—Red carmine

Progesterone—Red oil

Propenyl guaethol—Reserpine

b-Propriolactone—Rauwolfia serpentina

Propionic acid—R salt paste

n-Propyl acetate—Quinine hydrochloride

n-Propyl alcohol—Quinine bisulfate

n-Propyl gallate—Quinine

n-Propyl-p-hyroxybenzoate—Quinidine sulfate

Propyl thiouracil—Quicksilver

n-Propylamine—Quince seed

n-Propylene dichloride—Pyroxylin

Propylene dichloride—Pyrogallol

Propylene glycol—Pyrogallic acid

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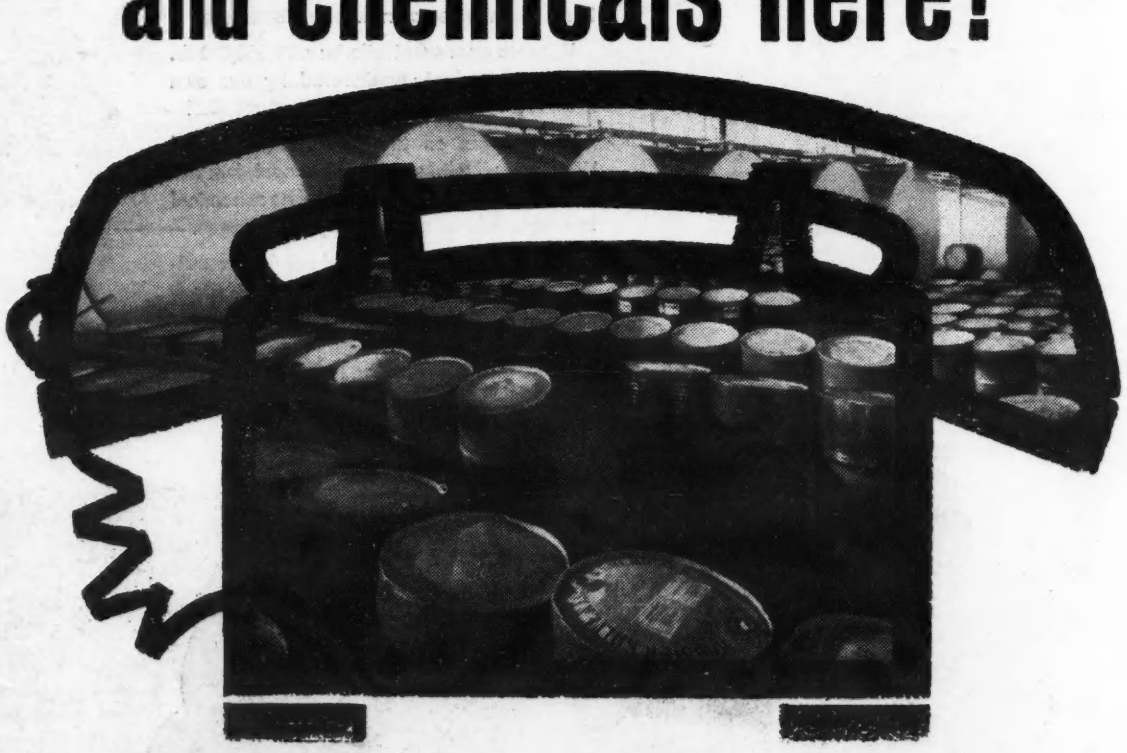

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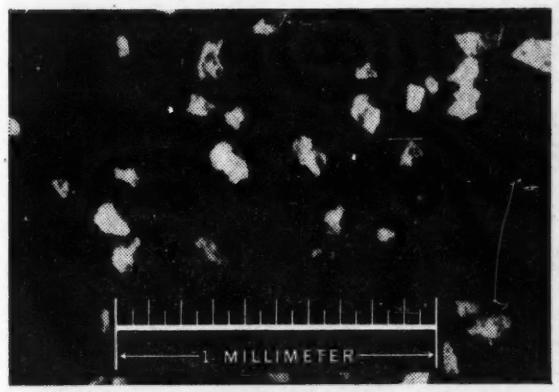
Rice bran oil, clarified, dms., t.c.l. lb. .15¼- —
tanks, dlvd. E lb. .14 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots., otto lb.600.00 -700.00
absolute lb.145.00 - —
Rosemary oil, Spanish, NF, cns., dms. lb. 1.15 - 1.20
Spanish, tech., cns., dms. lb. .80 - .95
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45%, fib. dms., works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .1375- —
Houston, Texas gal. .155 - —
Rue oil, bots lb. 2.75 - 3.00
Rutin, NF, fib. dms., 10 kilo lots, kilo.11.00 - —
fib. dms., 5 kilo lots kilo.11.50 - —
fib. dms., 1 kilo kilo.13.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., t.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb lots, works lb. 2.50 - —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb. 1.50 - —
dms., smaller lots lb. 1.60 - —
USP, powd., soluble, dms., 1,000-lb. lots lb. 1.55 - —
dms., smaller lots lb. 1.65 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.53 - —
dms., smaller lots lb. 1.63 - —
Safflower oil, dms., New York lb. .19¼- .19¾
tanks, Atl. coast lb. .17¼- —
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms. lb. .65 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots lb.12.00 -15.00
Dalmatian, cns lb. 2.85 - 3.23
Spanish, cns lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb. 1.23 - —
dms., t.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.05 - —
Salicylic acid, tech., fib. dms., c.l., t.l., dlvd lb. .40½- —
fib. dms., t.c.l., dlvd lb. .44¾- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¾- —
200-lb. fib. dms., less than 1,000 lbs lb. .54¾- —
100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c per lb higher.
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs., lb. .55 - .66
powd, fib dms lb .75 .76
Sandalwood oil, cns lb.26.00 -30.00
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 —
lb. No stocks.
Sassafras oil, artif., dms lb. .45 —
Nat., dom., dms lb. 1.40 - —
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd., bgs., frt alld. 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, 10 oz. lots, bots oz.13.50 - —
Sebacic acid, CP, bgs., c.l., works lb. .69½- —
bgs., t.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., t.c.l., works lb. .67½- —
Seidlitz mixture, fib. dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 6.50 - —
Senega root, bls lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls. lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls. lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms., t.c.l lb. .37 - .38
Sesame seed, Colombian, bgs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
dms., t.c.l., works lb. .22 - .20½
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots tc. per lb higher for all packages.
Shellac, bleached, refd, bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots, lb. .34 - .37
superfine, bgs. 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg lots tc per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., t.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs. t.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 —
bgs. t.c.l. works, ex whse ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs., t.c.l., works ton.25.00 - —
99½% 140 mesh bgs., c.l. works ton.15.00 - —
bgs., t.c.l. works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, ex Troy oz. .91¼- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¼- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots., 250-500 oz., same basis, oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 - —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls. lb. .35 - —
Powd., bls. lb. .40 - —
Whole, bls. lb. .23 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., t.c.l., stock pts., 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.83 - —
paper bgs., t.c.l., stock pts. 100 lbs. 3.93 - 4.73
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
Liq. 73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works. 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
bgs., t.c.l., same basis lb. .16½- —
NF, 60%, gran., dms., c.l., works, lb. .15½- —
dms., t.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .27½- —
bgs., t.c.l., dlvd. E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb. dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.35 - —
less than 100-kilos kilo. 6.60 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., t.c.l., same basis lb. .39 - —
USP, 100-lb. dms., ton lots, same basis lb. .43 - —
100-lb. dms., 1,000-lb. lots, same basis lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l. works 100 lbs 2.95 - —
bgs., t.c.l. works 100 lbs 3.85 - —
USP, powd., bgs, c.l., works, 100 lbs 2.55 - —
bgs., t.c.l. works 100 lbs 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb .13 —
bgs., t.c.l. works lb. .13½ .14¼
Sodium bichromate in dms ¼c. per lb higher
Sodium bifluoride, fib. dms., c.l., works, frt equald lb. .19½- —
fib. dms., t.c.l., same basis lb. .2025 - —
Sodium bisulfate, bulk c.l. works, 100 lbs 2.00 —
dms c.l., frt. equald 100 lbs 3.00 - 3.60
dms. t.c.l. frt equald 100 lbs 3.50 - 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., t.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls. c.l., works 100 lbs 1.70 - —
bbls. t.c.l. works 100 lbs 2.20 - —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works lb.19.90 —
dms., t.c.l., works lb.33.00 -40.00
stabilized water soln., 12% NaBH, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal).

Get Sodium Bicarbonate in the grain size you need every time...

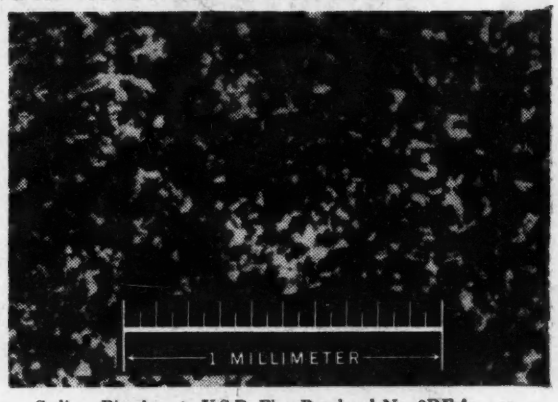
FROM CHURCH & DWIGHT



Sodium Bicarbonate U.S.P. Powdered No. 1—For general purpose use in chemical processing, dyestuffs, adhesives, starches, textiles and industrial applications.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	200 Mesh	35.0%
100 Mesh	.5%	325 Mesh	70.0%
170 Mesh	20.0%	400 Mesh	80.0%



Sodium Bicarbonate U.S.P. Fine Powdered No. 3DF for use specifically in dry powder fire extinguisher mixes, also in rubber and plastics blowing, lubricant for sheet vinyl.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

170 Mesh	Trace	325 Mesh	25.0%
200 Mesh	2.0%	400 Mesh	45.0%

Sodium Bicarbonate U.S.P. Granular No. 5 for use in effervescent salts, other pharmaceuticals and special types of cleansers.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	100 Mesh	92.5%
65 Mesh	27.0%	170 Mesh	99.0%
80 Mesh	66.5%		

Sodium Bicarbonate U.S.P. Treated Free-Flowing for use in fire extinguishers and sponge rubber.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	200 Mesh	35.0%
100 Mesh	.5%	325 Mesh	70.0%
170 Mesh	20.0%	400 Mesh	80.0%

Are you getting Sodium Bicarbonate of the specific grain size for optimum results in your process or for maximum shelf life and performance of your products? You can eliminate doubts by specifying Church & Dwight. This simple step will assure you of obtaining the widest selection of grain sizes available because Church & Dwight is the country's largest supplier of Sodium Bicarbonate U.S.P. You'll also receive for the asking unmatched technical service based on more than 100 years of experience with Sodium Bicarbonate. Unusual grain size requirements are given special attention. Try us and see. For technical data on all grades of Sodium Bicarbonate, send for brochure, "Church & Dwight Sodium Bicarbonate—How It Serves Industry Today."

CHURCH & DWIGHT CO., INC., 70 PINE STREET, NEW YORK 5, N. Y.

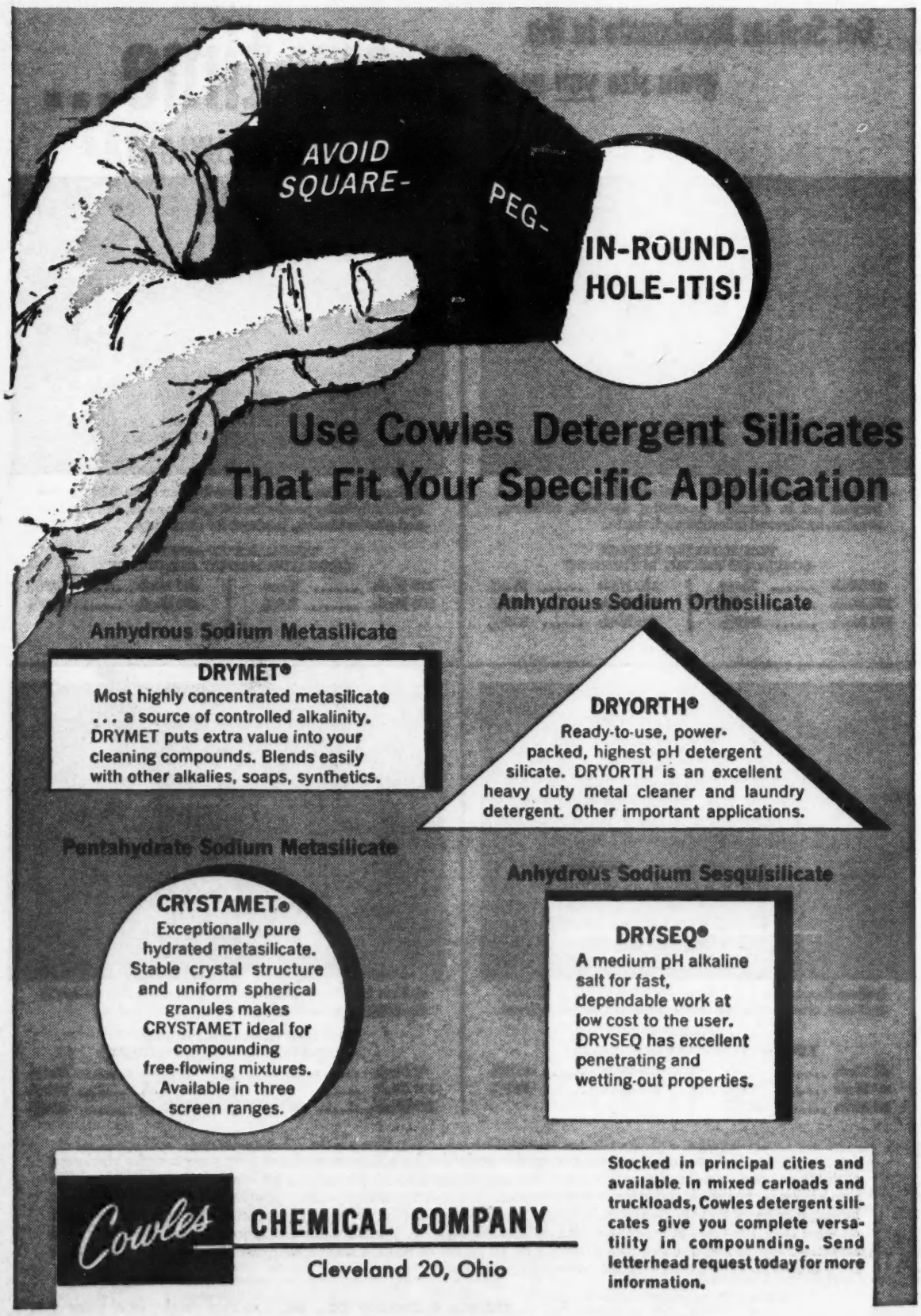
Sodium Carbonate—Sodium Sulfanilate

Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms. l.c.l. works lb. .09½- .10¼
Sodium chlorate in 100-lb. dms., only, ¼c per lb higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech. dms., c.l., works lb. .58 - —
dms. 20-dm lots or more works lb. .66 - —
dms. smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms. l.c.l., works lb. .28 - —
Sodium chromate, anhyd. fib. dms., c.l., t.l., works lb. .14¾- —
fib dms l.c.l. works lb. .15¼- .16½
Tetrahydrate, bgs., c.l., t.l., works. lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate anhyd., 200-lb dm., f.o.b works E lb. .62 - —
NF VIII, gran. bgs., c.l., same basis lb. .26 - —
USP XIV gran. bgs., c.l., same basis lb. .29 - —
Sodium citrate USP powd prices ½c higher.
Sodium cyanate, dms. 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10

Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb lots lb. .188 - —
dms., same basis, 1,000 to 4,900-lb. lots lb. .198 - —
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms. l.c.l., works lb. .18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¼- —
Sodium fluoride white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works. 100 lbs. 7.05 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms.lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech. bgs., c.l., t.l., same basis lb. .34 - —

Sodium hydride, 80% soln. in oil, dms., works lb. 1.35 - 3.00
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point, lb. 2.20 - —
dms., 50-99 lbs. same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.30 - —
dms., 1,000 lbs or more, same basis lb .95 —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms. c.l., frt. alld lb. .23½- —
dms. l.c.l., frt. alld. lb. .25¾- —
Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm lots, lb .23¼- .26
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 6.50
l.c.l., bgs., works 100 lbs. 4.40 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran. bgs., c.l. works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bgs., smaller lots, ex whse 100 lbs. 9.61 -11.61
Tetrahydrate, bgs., c.l., works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs., smaller lots, ex whse 100 lbs. 16.08 -18.08
Sodium, metallic, bricks, c.l., works. lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19½- —
tanks, works lb. .17 - —

Sodium metaliinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Pentahydrate, bgs., c.l., works. 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., l.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .96
Cryst., dms., works, frt. alld lb. .74 .76
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate, monohydrated)
Sodium naphthionate, bbls. lb. .77 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.40 - —
bbls., l.c.l., same basis 100 lbs. 11.40 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works. 100 lbs. 12.35 - —
99%, bgs., works 100 lbs. 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms. lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.10 - —
bgs., l.c.l., same basis 100 lbs. 8.50 - 9.55
Dibasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs. 5.15 - 5.90
Duohydrate, bgs., c.l., frt. equald 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 - —
Monobasic, anhyd bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., l.c.l., same basis 100 lbs. 9.55 -10.15
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., l.c.l., frt. equald 100 lbs. 9.60 -10.20
Sodium phosphate in dms. 60c. to 80c. higher than bgs.
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20¼
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .37 - —
Prices W. of Rockies 3c. per lb. more.
Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald. 100 lbs. 11.25 - —
bgs., l.c.l., same basis 100 lbs. 12.00 -12.50
Ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 100 lbs. 4.35 - 4.60
dlvd. zone 3 100 lbs. 4.75 - 4.90
dlvd. zone 4 100 lbs. 5.35 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms. c.l., t.l., works 100 lbs. 6.20 - —
hydrated, bgs., c.l., works. 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs. 1.90 - 3.40
tanks, works 100 lbs. 1.20 - —
47° Be., 1:2.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E. lb. .704 - .750
Sodium sulfa drugs (see Sulfa name)
Sodium sulfanilate, bbls., works lb. .23 - —



Use Cowles Detergent Silicates That Fit Your Specific Application

Anhydrous Sodium Metasilicate

DRYMET®
Most highly concentrated metasilicate ... a source of controlled alkalinity. DRYMET puts extra value into your cleaning compounds. Blends easily with other alkalies, soaps, synthetics.

Anhydrous Sodium Orthosilicate

DRYORTH®
Ready-to-use, power-packed, highest pH detergent silicate. DRYORTH is an excellent heavy duty metal cleaner and laundry detergent. Other important applications.

Pentahydrate Sodium Metasilicate

CRYSTAMET®
Exceptionally pure hydrated metasilicate. Stable crystal structure and uniform spherical granules makes CRYSTAMET ideal for compounding free-flowing mixtures. Available in three screen ranges.

Anhydrous Sodium Sesquisilicate

DRYSEQ®
A medium pH alkaline salt for fast, dependable work at low cost to the user. DRYSEQ has excellent penetrating and wetting-out properties.

Cowles CHEMICAL COMPANY
Cleveland 20, Ohio

Stocked in principal cities and available in mixed carloads and truckloads, Cowles detergent silicates give you complete versatility in compounding. Send letterhead request today for more information.

Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., divd. E ton.36.00 - —
Tech., detergent, rayon grade, bgs., c.l., works..ton.38.00 - —
bulk, c.l., works..ton.34.00 - —
USP, cryst., fib dms. .....lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., tech., bgs., c.l., works..100 lbs. 3.50 - —
bgs., t.l. same basis 100 lbs 4.00 - —
Powd., bgs., c.l., works..100 lbs. 7.55 - —
bgs. l.c.l. same basis 100 lbs. 7.95 — —
Sodium sulfocyanide. CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works frt equald lb. .04½- —
dms., l.c.l. same basis lb. .05½- —
Sodium thiocyanate, purified, cryst., 250-lb dms lb. .90 - —
Tech. anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate NF cryst. bbls. lb. .13½- —
Tech. anhyd. 100-lb bgs. c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb bgs. l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
photograde, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb bgs. l.c.l. l.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate. ctns. c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld. E. lb. .35 —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l. frt. alld E lb. 42 —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - —
bulk, hopper cars, same basis. 100 lbs. 7.35 - —
Sodium trisilicate, powd., 1:3.2, bgs. c.l., works 100 lbs 8.95 — —
bgs., l.c.l., works .....100 lbs 9.70 -13.13
dms., c.l., works .....100 lbs. 9.45 — —
dms., l.c.l., works .....100 lbs.10.20 -10.60
Sodium tungstate. tech., kgs. divd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., divd lb. .22½- —
dms., l.t.l., same basis ... lb. .23 - —
Sodium-zirconyl sulfate, fib dms., 1,000-lb lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Petroleum, straight, aromatic, 310°-360F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York.gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal. .30 - —
Partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 - —
266°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works. lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .18¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works. lb .25 .26
powd., dms., c.l., works ..... lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comi., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works.....lb. .27 - —
tanks, works .....lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works ..... lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works..... lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted Decatur..ton.64.00 - —
Soybean oil, crude, tanks, Decatur, lb. .1120- —
Foots, soapstock acid 95%, tanks, New York..lb. .07½- —
Alkali, refd., dms. .....lb. .1543- .1565
tanks .....lb. .1343- —
Claried, dms. .....lbs. .1493- .1515
tanks .....lb. .1293- —
Salad, refd., dms .....lb. .1500- .1565
tanks .....lb. .1360- —
Soybean oil acids, dbl. dist., dms., lb. .16¾- .19¼
tanks .....lb. .14½- —
S. D., dms.....lb. .15½- .18
tanks .....lb. .13 - —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb 75 — —
Spearmint oil, NF, dms. .....lb. 4.50 - —
Sperm oil, bleached winter, 40°, dms. lb. .1675- .1715
tanks .....lb. .1475- —
Nat., winter, 45°, dms.....lb. .1575- .1615
tanks .....lb. .1375- —
Spermaceti wax, blocks, cs.....lb. .33 - .33
Cakes, cs. .....lb. .33 - .34
Spruce oil, cns., dms. .....lb. 2.10 - 3.85
Squill, white, bls. .....lb. .16 - .18
Powd., bbls., bxs. .....lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works. lb. .831 - .859
Stannous oxide, dms., divd. .....lb. 1.590 -1.720
Stannous chloride, anhyd., dms. lb. 1.110 -1.323
Stannous sulfate, works .....lb. 1.159 -1.199
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. .. lb. .60 .61
Stearic acid, dbl. pressed, bgs....lb. .17¼- .19¾
Single-pressed, bgs. .....lb. .16¾- .19¼
Triple-pressed, bgs. .....lb. .19 - .21½
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston ..... gal. .1475- —
tanks, group 3 ..... gal. .12875- —
Stramonium leaves, bgs. ..... lb. .16½- .18
Streptomycin sulfate, bulk....gram. .03 - —
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works.lb. .33 - —
dms., 1-ton lots, works..... lb. .37 - —
Tech., dms., works ..... lb. .19 - —
Strontium chromate. fib dms., divd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots.lb. 3.27 - —
Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works ..... 100 lbs.12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. .... oz.25.00 -35.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 2.50 - 3.00
Styrax gum, USP cs. lb. 4.50 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., divd. lb. .17 - —
dms., l.c.l. same basis lb. .19 - —
tanks, frt. equald. .....lb. .13 - —
Tech., 99.2%, dms., c.l., divd. lb. .15 - —
dms., l.c.l., same basis.....lb. .17 - —
tanks, frt. equald .....lb. .1090- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.
Styrolyl acetate, bots.....lb. 1.03 - 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis ..... lb. .63 - .76
Succinic anhydride, dms., c.l., t.l., divd lb. .51 - —
dms., l.c.l., same basis ..... lb. .52 - —
Sucrose, refd., white, bgs., refy E. lb. .0940- —
Sucrose acetate, isobutyrate, 90%, dms. t.l., divd lb. .23¼- —
dms., l.t.l., same basis .... lb .35 —
tanks, same basis ..... lb. .31 —
100%, t.l., dms., divd. ..... lb. .35½- —
l.t.l., dms., same basis .... lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs. l.c.l., works lb. 1.00 —
Sugar (see Sucrose)
Sugar cane wax dom., refd., slabs, 50-lb ctns., works lb. .60 .65
50-lb ctns. spot ... lb. .65 .75
Sulfabenzamide, dms. kilo 8.80 9.90
Sulfabenzamide-sodium, dms. kilo 9.00 10.10
Sulfacetamide, USP fib dms kilo. 6.61 6.83
Sulfacetamide-sodium USP, fib. dms kilo. 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo.23.35 24.45
USP, powd., dms. kilo.22.60 23.70
Sulfadiazine-sodium, USP dms kilo.24.80 25.90
Sulfaguanidine, NF X dms kilo. 5.50 6.60
Sulfamerazine, USP, microcrystals, dms kilo.23.50 - —
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.19.65 20.75
USP XV, powd., dms. kilo.18.75 19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 —
dms., l.c.l., l.t.l., works 100 lbs.17.50 18.99
Gran., dms., c.l., t.l., works. 100 lbs.14.75 —
dms., l.c.l., l.t.l., works 100 lbs.16.25 -17.25

WEST END

advance planning OF EXPANDED SODIUM SULFATE PRODUCTION ANTICIPATES INDUSTRY'S GROWING NEEDS

WEST END demonstrates its complete reliability as a major source by the continuing enlargement of its production facilities devoted to the manufacture of highest quality anhydrous sodium sulfate as a prime product. Independent of other product production and located at the site of vast natural raw material supply, West End is solidly qualified to handle the complete requirements of customers dependably, economically and efficiently.

Stauffer CHEMICALS

WEST END CHEMICAL COMPANY • DIVISION OF STAUFFER CHEMICAL COMPANY

636 CALIFORNIA STREET, SAN FRANCISCO, CALIFORNIA • PLANT: WESTEND, CALIFORNIA

Sulfanilamide, NF reg., 1,000 lb., fib. dms., frt. equald lb. 1.75 • —
NF, reg., smaller lots, fib. dms., frt. equald lb. 1.80 • —
Sulfanilamide quinoxaline, veterinary, dms kilo. 16.28 • —
Sulfanilic acid, tech. dms. c.l., frt. alld lb. .21 • —
dms., l.c.l., frt. alld lb. .23 • —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd., dms. kilo. 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 —
Sulfur, comi., flour, bgs., mines, 100 lbs. 2.35 • —
bbls., mines 100 lbs. 3.30 • —
lump, bgs., mines 100 lbs. 2.25 • —
bbls., mines 100 lbs. 2.80 • —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton. 23.50 • —
export, f.o.b vessels, Gulf ports, long-ton. 25.00 • —
US and Canada, f.o.b. vessels Gulf ports long-ton. 25.00 —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton. 24.00 —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 • —
bbls., mines 100 lbs. 7.00 • —
flour, light, bgs., mines 100 lbs. 5.25 • —
bbls., mines 100 lbs. 6.25 • —
lump, bgs., mines 100 lbs. 4.95 • —
rolls, bgs., mines 100 lbs. 5.50 • —
bbls., mines 100 lbs. 6.25 • —
salt block, bgs., mines 100 lbs. 4.65 • —
virgin block, bbls., mines 100 lbs. 4.70 • —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs. 2.45 • —
bbls. mines 100 lbs. 3.70 • —
98-100%, pashing through mesh, bgs., mines 100 lbs. 2.55 • —
bbls., mines 100 lbs. 3.80 • —
Refd., bgs., mines 100 lbs. 4.90 • —
bbls., mines 100 lbs. 6.05 • —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 • —
bbls., mines 100 lbs. 4.00 • —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05½- —
ret. dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq., comi., cyls., works, frt. equald lb. .10 - .13
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05½- —
dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 • —
cbys., l.c.l., works 100 lbs. 2 30 • —
tanks, works ton. 18 60 • —
66°Be, cbys., c.l., works 100 lbs. 2.25 • —
cbys., l.c.l., works 100 lbs 2.55 - 3.35
tanks, works ton 22.35 • —
98%, tanks, works, East ton. 23.50 • —
99%, tanks, works, East ton. 23.70 • —
100%, tanks, works, East ton. 23.95 • —
Sulfuric acid, California works, tanks ton. 26.45 • —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers' cbys., l.c.l., same basis lb. .14½- .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots. extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20% tanks, works ton. 25.00 • —
40%, tanks, works ton. 29.00 • —
65%, tanks works ton. 39.50 • —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 .93
bulk, c.l., Carteret, N. J. unit-ton. .90 .93
Superphosphate, triple, 45% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla. unit-ton. 1.00 • —
bulk, f.o.b. vessel at Fla unit-ton. 1.05 • —
Sweet birch oil, USP, northern, cns lb 4.00 9.50
USP, southern, cns lb 2.00 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.16 • —
dms., l.c.l., same basis lb. 1.25 • —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 • —
dms., l.c.l., works lb 1.29 • —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton. 28.00 —
bgs., l.c.l., works ton. 31 00 -36.00
99.5%, 325 mesh, bgs., c.l., works, New York ton. 31.00 • —
bgs., l.c.l., works ton. 34 00 —
99.95X, 400 mesh, micronized, bgs., c.l. works ton. 36.00 • —
625 mesh, micronized, bgs., c.l., works ton 80 00 —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton. 34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton. 19.40 —
bgs., l.c.l., works ton. 37 00 —
Imp., Canadian, grd., bgs., c.l., mines ton 20 00 -35.00
tanks, works lb. .02¾- .03¼
Tall oil, crude, tanks, works lb. .03¼- —
Acid, refined dms., c.l., works lb. .08¾- .10
tanks, works lb. .07½- .08¾
Dist., depending on grade, dms., c.l., works lb. .07½- .08¾
tanks, works lb. .06 - .08
Tall oil fatty acids, less 2% rosin acid, dms., c.l., works lb. .08 - .11¼
tanks, works lb. .06 - .09¼
2-6% rosin acid, dms., c.l., works, lb. .07 - .08
tanks, works lb. .05 - .06
Tallow, edible, tanks, dlvd lb. .06¾-Nom.
Inedible, fancy, bleachable, tanks, lb. .06¼- —
fancy, guaranteed, bulk, f.o.b. steamer lb. .06½- —
dms., f.a.s. lb. .07½- —
tanks, dlvd. lb. .06¼- —
No. 1, dlvd. lb. .05¾- —
Prime, tanks, dlvd. lb. .06 - —
Special tanks, dlvd. lb. .05⅞- —
Sulfonated, 25%, bbls., l.c.l. lb. .08½- .08¾
50%, bbls., l.c.l. lb. .10½- .11
Tallow acids, dist., dms. lb. .13¾- .16¼
tanks lb. .11¼- —
Hydrogenated, dms. lb. .16 - .18½
Tallow oil, acidless, dms., c.l. lb. .14 • —
dms., l.c.l. lb. .16 • —
tanks lb. .12½- —
Tangerine oil, Florida, dms lb. 4.75 —
Tankage, animal, feeding, 9-11% ammonia, New York bulk unit-ton. 4.75 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb lots lb 2.05 —
bbls., smaller lots lb 2.06 2.07
powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech., dms lb 1.05 —
Tansy oil, dms lb. 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., frt. equald gal. .53½- —
basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms lb. 1.65 - 1.70
Testosterone, USP, bots. gram. No prices.
Testosterone propionate, USP bots. gram. No prices.
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., l.c.l., dlvd. E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or t.l.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., l.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —
Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .28½- —
tanks, dlvd. E. of Denver lb. .25 - —
tanks, dlvd. W. of Denver lb. .26 - —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt. alld. E lb. .39 - —
l.c.l., t.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd lb. 7.50 -10.00
Thallium sulfate, 99%, bots., dlvd. lb 5.00 -10.00
Theobromine, NF, fib dms., 100-lbs., f.o.b., works lb. 4.10 4.15
Theobromine and sodium acetate, USP, fib dms., 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt alld kilo. 36.00 - —
USP, ampule grade, fib., dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib. dms., frt alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs., works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, dms., 25 kilos, works, kilo. 115.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs lb. .12 - —
triple sifted, bgs. lb. .25 - —
Spanish, bgs. lb. .09 - —
Thyme oil, NF, red, cns., dms lb. 3.35 - 3.60
NF, white, cns lb. 3.60 - 3.95
Tech., white, cns lb. .80 - 1.10
Thymol, fib dms., 25-lbs., f.o.b. works lb 2.45 —
Thymol iodide, NF, dms., 100-lbs f.o.b. works lb 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. 1.12 • —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½- —
reg., bgs., c.l., dlvd. lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla. ton. 180.00 - —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y ton. 205.00 - —
bgs., ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅝- —
bgs., l.c.l., works lb. .09⅞- —
50% Ti O_2, high-tinting, dms., c.l., lb. .14⅜- —
dms., l.c.l. lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld. E lb. .81 - —
dms., l.c.l., l.t.l., 5,000 lbs- 19,999 lbs., same basis lb. .81½- —
dms., l.c.l., l.t.l., less than 5,000 lbs., same basis lb. .84 - —
For west coast delivery add 2c. per lb.
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots. kilo. 99.00 - —
dl-a-Tocopheryl acetate, bots kilo. 90.00 —
25% dry. powd., bots kilo. 22.50 -24.00
33% dry. powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 —
Paste, kgs., 100% basis lb 1.50 —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb. 1.50 • —
Tolu balsam, cns lb. 4.00 • —
Toluene, coaltar, indust., or nitration, tanks, dlvd. E of Rockies gal. .25½- —
Petroleum, indust., tanks f.o.b., f.o.b., frt. equald gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .83 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms., l.c.l., t.l.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs. lb. 3.75 3.80
No. 3, cs. lb. 3.40 3.65
USP, powd., bbls. lb 1.05 1.15
Triacetin, dms., c.l., dlvd. E, of Rockies lb. .38 - —
dms., l.c.l., same basis lb. .39½- —
tanks, same basis lb. .35½- —
Triallylamine, dms., c.l., dlvd lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver. lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld. E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms, l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin dms. l.c.l. dlvd lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —
Trichlorobenzene dms. c.l. frt. alld. E lb. .15 - —
dms., l.c.l. frt. alld. E. lb. .16 - —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices in the West 1¼c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd. lb. .16 - —
tanks, dlvd lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms., c.l., or t.l., dlvd lb. .12½- —
dms., l.c.l., dlvd. lb. .14 - .14½
tanks, dlvd. lb. .11¼- —
Trichloroisocyanuric acid dms., c.l., t.l., frt. equald lb. .65 - —
dms. l.c.l. same basis lb .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., non-ret. dms., 1 dm. frt. equald kilo. 3.10 • —
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .36 • —
dms., l.c.l., dlvd. lb. .36 • —
tanks dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .35 • —
dms., l.c.l., dlvd. lb. .36 • —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .22½- —
dms., l.c.l., dlvd. E lb. .24 • —
tanks, dlvd. E lb. .20 • —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., l.c.l., same basis lb. .26 • —
tanks, same basis lb. .22 • —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms. l.c.l. frt alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine, dms., c.l., dlvd. E. lb. .50 — —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .46¼- —
non-ret dms., l.c.l., frt alld. E. of Denver lb. .47¼- —
tanks, frt alld E. of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .42 - —
tanks, dlvd lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E lb. .53 - —
tanks, dlvd E lb. .49 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23½- —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 .305
tanks frt equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35½- —
dms., l.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .30½- —
dms., l.c.l., t.t.l., same basis lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., l.c.l., t.t.l., dlvd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls. l.c.l., frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene dms., c.l., dlvd. E gal. .44 - —
dms., l.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt alld. E lb. .20½- —
dms. l.c.l. t.t.l. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Trypophane, dms., 1 kilo, works. kilo. 154.00 - —
Tung oil, dms., New York lb. .23 - .28½
tanks, imported lb. .26½- .27
tanks, domestic, mills lb. .26½- Nom.
Tungsten metal powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls. works lb. .62 — —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil NF, cns., dms lb. .28 .50
Tuscan red bbls., frt. equald lb. .26 .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .33½- .38
Jobbing types, dry, bbls., same basis lb. .18 - .19
Regular types, dry bbls., same basis lb. .25 - .40¼
Ultramarine blue prices 1c higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs. works lb. .07¾- .08¼
Turkey-type bgs. works lb. .08½- .08¾
Undecylenic acid 55-gal dms., f.o.b. works lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N indust. bgs., c.l., t.l., f.o.b. plant ton. 100.00 • —
Feed grade, c.l., t.l., f.o.b. plant. ton. 95.00 • —
45% N, agricultural, bgs., c.l. f.o.b. plant ton. 92.50 • —
Bulk, c.l., t.l., same basis ton. 86.50 • —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 • —
37 grade, tanks, same basis ton. 145.00 • —
Urethane, USP dms., t.l., f.o.b., works lb. .65 • —
dms., l.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls lb. .12 • —

V

Valerian root, Belgian bgs. lb. .32 • —
Indian, bgs lb .25 • —
dl-Valine, dms., 1 kilo, works kilo. 37.00 • —
Vanadium pentoxide, tech., dms., works lb. 1.38 • —
Vandyke brown, bbls, works lb. .09½- .13
Vanilla beans, Bourbon, tins lb. 7.00 - 7.15
Mexican cuts, tins lb. 7.10 - 7.40
whole, tins lb. 7.40 - 7.80
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb lots or more lb. 3.00 • —
less than 2,000 lbs lb. 3.20 3.30
Venetian red, jobbing, bgs. works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 — —
35%, bgs., works lb. .0625- —
40%, bgs. works lb .0675 - —
Vetiver oil, Bourbon, cns lb. 17.00 -17.25
Haitian, cns. lb. 12.00 -14.00

Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal. dms., l.c.l., dlvd lb. .1960- —
tanks, dlvd. lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. .1610- —
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works, min. frt equald E. lb. .0750- —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot 1.12 - —
bots. 25cc., hospitals bot 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works lb. .30¼- —
dms., l.c.l., works lb. .31 - —
tanks, works lb. .28¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14 - —
Zone 2 prices are 1c. per lb. higher.
Zone 1 is East of Rockies. Zone 2 is West of Rockies.
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼- —
Vitamin A acetate dry, 500,000 units per gram, kilo lots kilo.65.00 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.45.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. .57 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.52.00 - —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 - —
0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm.52.00 - —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram.52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms. frt. alld gram. .57 - —
Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo, dms., frt. alld gram. .57 - —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P petroleum).

W

Wahoo root bark, bls. lb. 2.00 2.25
Warfarin 0.5% dms., 50-lb. lots, dlvd lb 1.95 - —
dms. 25-49-lb lots, New York or Chicago lb 2.05 - —
dms. 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark rossed, bls. lb .21 - .22
White precipitate, USP, powd., dms., 100 lbs. f.o.b. works lb 5.50 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .30 - —
Wintergreen oil, USP nat. north. ern, cns lb. 6.35 -17.50
USP nat. southern cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .30 .35
Witch hazel leaves, bls lb. .75 - .80
Wollastonite fine paint grade, bgs., c.l., works ton.41.00 - —
bgs., l.c.l., ex whse. ton.51.00 - —
medium paint grade, bgs., c.l., works ton.29.00 - —
bgs., l.c.l., ex whse. ton.39.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb. 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 - —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N.Y. gal. .29½- —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Minnequa, Col. gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal .29 - —
Petroleum, indust., tanks, f.o.b. works:
Bayonne, N. J gal .29 - —
Baytown, Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .29
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .21 - —
dms., l.c.l., f.o.b., Richmond, Calif lb. .22 - —
tanks, frt. alld. lb. .19 - —
o-Xylene, dms., c.l., works lb. .08 - —
dms., l.c.l., works lb. .09 - —
tanks, works lb. .06 - .06½
p-Xylene, dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .21 - —
tanks, frt. alld. lb. .1645- —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 - —
56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .33 - —
60°-62°C., m.p., dms., l.c.l., same basis lb. .40 - —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.23 - —
dms., l.c.l., same basis gal. 1.30 - —
tanks, same basis gal. 1.05 - —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis, gal. 1.35 - —
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal. 1.40 - —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 - —
2,5-Xylidine, tech., dms., frt. alld. lb. 1.30 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .38 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd lb. .27 - —
primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms lb. .47 - —
USP XV, 270 mcg. B_1 per gram, 100-lb. dms lb. .53 - —
Yeast, brewers, primary, USP, XV, 300 mcg., B_1 per gram, 100-lb. dms lb. .56 - —
USP XV, 900 mcg. B_1 per gram, 100-lb. dms. lb. .60 - —
Torula, USP dlvd. lb. .18 - —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls. lb. .40 .45
Ylang Ylang oil, Bourbon, bots lb. 7.00 -22.00
extra, bots lb.24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works lb. .37 - —
50-lb. bgs., smaller lots, f.o.b. works lb. .41 - .44
Zinc acetate, NF, VIII, dms lb. .53 - —
Tech., dms., l.t.l., works lb. .2950- —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 - —
bgs., less than 1,000 lbs., same basis lb. .27 - —

—Continued on page 42

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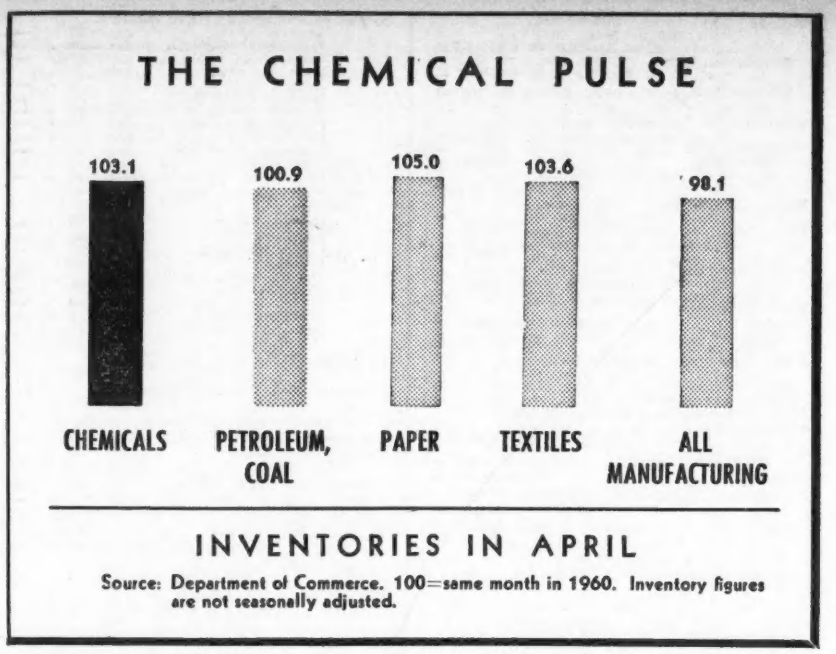


Those Tax Proposals

The chemical industry, as reported on page 3 last week, is but one of all the industrial and commercial groups in this country which do not take kindly to the President's tax proposals. There is at least as general a dislike for them among the members of the legislative branch of the federal government. The ways and means committee concluded a month of hearings on the proposals June 9 after listening to two hundred witnesses, almost all of them in opposition. It is now in closed-door sessions on what it is going to do with the proposals. Business is telling it on the outside.

The opposition to the tax proposals is not confined to the change in the method of collecting taxes on business incomes earned abroad; it includes even the tax incentive—or break—for business on the basis of expenditures for new plant or equipment, which has been called a "handout on a preferred basis, which would create more problems than it could solve."

Guesses on the outcome of the congressional dealing with the proposals run all over the lot. The only approach to agreement is that the President will not get all that he has asked for. Many are of the opinion that the congress will pigeonhole the proposals for about a year. That is where business can get in some urging.

Some of the condemnation of the proposals as harsh and unjust appear to get off on the wrong foot; one business executive has been reported to have been critical of "increasing" taxes because of their being reductive of earnings on investments, especially in underdeveloped countries where investment is the "cheapest kind of foreign aid." As stated in the proposal, the change in business income taxing would not be an increase. But, that is but one phase of the foreign income tax reform.

The Treasury Department has a big package of changes, which it has said would increase revenues by at least $250,000,000. If there is that much money in the pot, it can be expected that the countries in which such alleged incomes are earned will start taxing them at much higher rates.

Studying, Knowing Latins

After several months of rumoring and denying, it was reported about a week ago that "qualified administrative sources" were saying that President Kennedy was planning to fly to South America next month. He was to be in Montevideo, Urugauy, July 17 to attend the Inter-American Economic Conference. Later, it was said, he was to go to Brazil for a conference with its president.

The "sources" said that the President's plan to visit our Latin neighbors had a "perhaps" in it—he would not go if so advised by Ambassador Stevenson, who is scheduled to be back in Washington later this month. It was not considered likely, however, that there would be such advising because of the cordiality with which Mr. Stevenson was being received almost everywhere on his South American mission.

It is most earnestly to be desired that Stevenson tell the President everything that he has learned about the attitude of Latin Americans toward the US. Why, for example, was the cordiality of his reception in Venezuela and Argentina not manifested in Uruguay? In that country, as in the two larger ones, the political leaders agreed with the United States on what should be done to combat communism; but why are most of them "cool" toward any joint action with respect to Castroism in Cuba?

If we are going to get anywhere with the President's alliance for progress he and his people must know the answers to those two questions.

It is also essential that they know what is the attitude of the business leaders in Latin America. If the President decides to attend the economic conference in Uruguay, it is sincerely to be hoped and vigorously urged that he make all necessary arrangements to be accompanied by a most thoughtfully chosen delegation from his council of business advisers.

The President's alliance for progress is a most desirable objective. But, it can do very little necessary good unless it is fully implemented by the facilities of private enterprise. Very little good has been done or will be done by handing Latin American political leaders truckloads of US dollars, at least 75 percent of which never get where aid is needed. The needs for aid are in terms of food and goods, equipment and technical advice to promote self-help. They should be fully analyzed by reliable envoys of the Stevenson type and serviced by equally capable and trustworthy US agents, who will learn what is needed to be done, see to its satisfactory doing—and then let Washington know what it owes for the job.

Mr. Stevenson is doing a good job of selling the United States in Latin America. But, what must be known—and time alone will tell—is what do his "customers" want to buy; how and when is it going to be delivered; and at what rate and in what manner is it going to be paid for.

Private enterprise has a number of opportunities to do at least as much real good at far less cost by way of investment in Latin-American developments. A variously potential one is offered by way of the desire and plan of Argentina to spread its population and activities more equitably over its million square-miles of area to correct the condition that 45 percent of its people and two-thirds of its industrial and utility operations are in one-tenth of that area.

Washington Talks It Over

Chemical People Are Certain to Play a Big Role in the Government's Coal Research Program; In Fact, They Already Have Been Asked to Take Over a Top Spot Among the Advisors.

By Ralph L. Cherry
Washington Editor

The chemical industry is already alert as suggestions for lines of research on new and expanded uses for coal are beginning to pour in to the just-established Office of Coal Research in the Department of the Interior.

At the latest count, over sixty proposals have been submitted, some in rather advanced form, and these are now being screened and assigned priority labels against the time when the office will be in full swing issuing research contracts.

The chemical industry will be called upon to play an important part in this new emphasis by the government on finding new uses for a depressed commodity, and has been assigned a prominent place on the advisory committee set up to help the office formulate its program.

The primary objective will be to increase the consumption of coal by industry, with heavy emphasis on increasing its use as a fuel in the electric utilities business.

But, in addition to its fuel use, the office is also thinking along three other lines of research—the use of coal as an industrial raw material, gasification of coal with the aim of producing a gas which can be mixed with natural gas for industrial and consumer use, and the development of a liquid raw material from coal which can be utilized in refinery streams.

Officials hope to make it possible for coal-derived chemicals to move into markets now being supplied by petrochemicals.

George A. Lamb, director of the office, explained the aims of the program to the coal industry the other day in this fashion:

"The major objective of the office will be to expand the coal market through new and efficient mining, preparation, and utilization. Whatever success achieved will be measured by the volume of tonnage expansion, but this does not mean that we will be uninterested in projects that will give little or no volume.

"Such projects may be quite necessary to projects that fall into the tonnage category. For example, a proposal on coal chemicals may give prospects of little additional tonnage, but it may very well result in a profitable undertaking that can help support one which brings about an increased tonnage."

Meetings

American Chemical Society, national meeting, Chicago, September 3-8.
American Petroleum Institute, annual meeting, Palmer House and Conrad Hilton and Congress hotels, Chicago, November 13-15.
American Soybean Association, annual convention, Claypool hotel, Indianapolis, Ind., August 28-29.
American Tung Oil Association, annual meeting, Edgewater Gulf hotel, Edgewater Park, Miss., September 26-28.
Armed Forces Chemical Association, annual meeting, Statler-Hilton hotel, Washington, D. C., September 13-15.

Association of Food & Drug Officials of the United States, annual conference, Mayflower hotel, Washington, D. C., June 18-23.

Canadian Agricultural Chemicals Association, annual meeting and conference, Mont Tremblant Lodge, Mont Tremblant, Quebec, September 18-20.
Chemical Market Research Association, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 11-12; Mark Hopkins hotel, San Francisco, November 28-December 1.

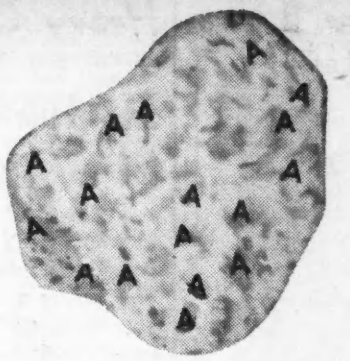
Drug, Chemical & Allied Trades Association, luncheon meeting, Commodore hotel, New York, June 21.

Drug,Chemical & Allied Trades Association, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Gordon Research Conferences, catalysis, Colby Junior College, New London, N. H.; chemistry and physics of liquids, New Hampton School, New Hampton, N. H.; cell structure and metabolism, Kimball Union Academy, Meriden, N. H., June 19-23.

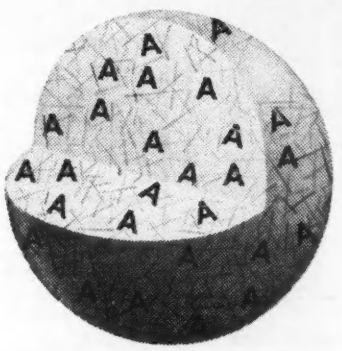
National Agricultural Chemicals Association, annual meeting, The Homestead, Hot Springs, Va., October 29-November 1.
National Chemical Exposition, sponsored by the Chicago section of the American Chemical Society, International Amphitheater, Chicago, September 5-8.
National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.
National Wholesale Druggists' Association, annual meeting, Americana hotel, Bal Harbour, Fla., October 14-19.

Vitamin A soaked in spongy material



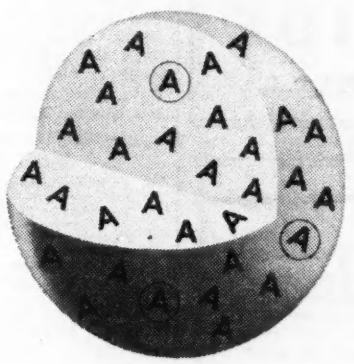
leaks out

Vitamin A dissolved in hot wax



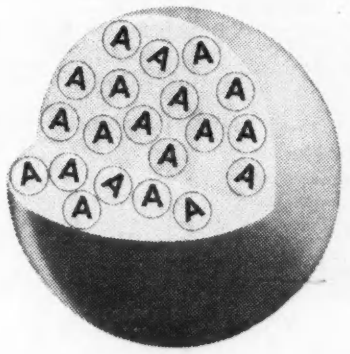
diffuses out between wax crystals

Vitamin A dissolved in gumlike substance



some dissolves, some doesn't

Vitamin A in edible gelatin spheres



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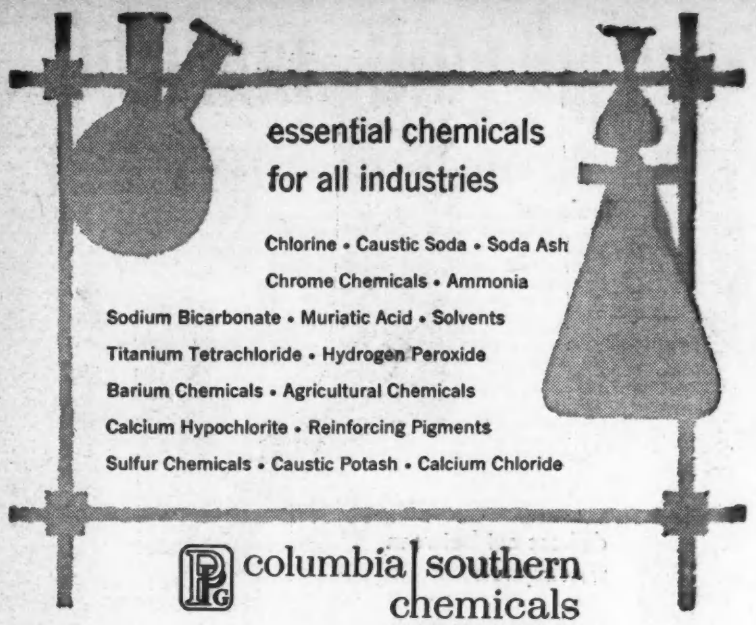
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Heavy Chemicals

Hydrofluoric Acid Prices Cut $2; Shading, Oversupply, New Plant Cited

The heat was on last week, and as the mercury climbed above 90 in the New York metropolitan area, prices of hydrofluoric acid buckled. Observers might just as well blame the weather, for all the satisfaction yielded by a check with producing quarters. From the size of the cuts (up to $2 or 15 percent), it was apparent that the firm initiating them meant business. This was confirmed by a spokesman for the company. The market has been sloppy, with a good deal of shading by competitors, he said, and this round of cuts, carrying tabs even lower than the competitive level, would put an end to the confusion.

Continuous expansion, carrying producing potential well over 100,000 tons yearly, was said to lie at the root of the problem. And this led observers to ask whether the cuts weren't really zeroed in on a new producer's 10,000 ton plant in New Jersey, slated to come on stream September 1. The element of timing seemed to support this view.

If the newcomer was indeed the target, the shot may have fallen short of the mark. The company is not concerned with the price situation of hydrofluoric acid, a spokesman said, because it will have a highly marketable gypsum co-product of exceptional purity.

July 1 Price Advances

Antimony pentachloride, 2½c. per lb.
Antimony trichloride, 3½c. per lb.
Molybdic acid, 10c. per lb.
Molybdenum trioxide, 17c. per lb.
Potassium chloride, chem. grade, 99.9%, $2 per ton
Sodium molybdenite, 10c. per lb.

Details on the gypsum co-product, including potential yield and quality, are expected to be disclosed next week.

Consternation at the price cuts together with a reluctant decision to go along with them emanated from another producing quarter. Expressing surprise at the move, a spokesman for this company seriously questioned whether there had been any price shading. None, he said, had come to his attention, although it had been rumored from time to time that the newcomer might make its debut below list.

Innate difficulties in the HF market center on captive use. Two merchant producers consume much of their own output in fluorocarbons; another use is for aluminum. In this situation, it is said, merchant acid becomes something of a sideline, with profit margins accordingly flexible.

Bearing this out, prices were reduced a sharp $2.10 in bulk a year ago, and just recently tank transports were introduced at carlot prices, adding up to a further price consideration.

Under the schedule issued last week, 70 percent aqueous acid is priced at $11.50 a hundredweight in bulk, down $1.90; smaller quantities were reduced $2. Anhydrous is quoted at $16 in bulk, down $2 with comparable reductions in small brackets.

Acids

Chromic—Automotive and appliance production finally moved out of low gear and took fair quantities of acid during the spring season. But summer doldrums lie around the corner. Prices are reported steady, material amply available.

Hydrochloric—with all the action centered on hydrofluoric acid last week, producers paid scant attention to this material, merely noting that movement to steel makers had been improving with the gradual recovery of that industry, and rating chemical business fair. Supplies are abundant, prices characteristically spotty in the east, quoted consistently elsewhere.

Paper Production Higher

The American Paper & Pulp Association reported paper production for the week ended June 10 at 92.0 percent of theoretical capacity, as compared with the revised figure of 89.4 percent for the previous week and 99.1 percent for the corresponding week of last year.

Price Trends

Advanced

None

Reduced

Hydrofluoric acid, anhy., bulk, $2 per 100-lbs.
Anhyd., cylinders, $1.50 per 100-lbs.
Aqueous, bulk, $1.90 per 100-lbs.
Aqueous, smaller quantities, $2 per 100-lbs.
Hydrogen cyanide, tanks, 13c. per lb.
Tin Metal (Straits), 1c. per lb.
Salts, ⅜c. to ½c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	June 17, 1960
106.83	106.85	106.81	106.88

For Current Prices See Page 10

Sulfuric—American Iron & Steel Institute estimates steel production during the week ended June 10 at 2,042,000 tons, off insignificantly from the previous week's 2,052,000 tons.

Steel mills have turned out 39,183,000 tons during the year to date (twenty-three weeks), as compared with 55,362,000 tons in the comparable period of last year.

Sulfuric acid prices at eastern points remain as previously—somewhat below list. No further deterioration was reported while the steel industry's doldrums were causing a sharp increase in the availability of sulfuric.

One factor helping to steady prices was the $2 advance in sulfur, trade observers say. This, in fact, may yet bring a comparable advance in the acid, economic weather permitting.

Bases and Salts

Caustic Soda—But for the lag in the paper industry, business is about what it should be this time of the year, trade sources say.

The long-term outlook of caustic soda poses a problem that may become serious. Caustic is a one-for-one co-product of chlorine, but growth of the latter is much more promising. This means that the recurrent oversupply of caustic may in a matter of a few years become chronic.

Chlorine—Business is on par with seasonal expectations. Prices have been unchanged since June last year, when an advance was posted. Supplies are ample.

Hydrogen Cyanide—Prices have been reduced one-cent a pound to 13c. in tank-cars, effective immediately. The move is credited to expanding demand for bulk HCN with a corresponding decrease in production costs. Bulk HCN was introduced in 1955 at 24c. a pound.

Sodium Molybdenite—Reflecting the advance in molybdenum metal, this material will be marked up 10c a pound on contract July 1 to a range of $1.62 to $2.19 a pound, as to quantity and quality.

Potassium Chloride—A major producer last fortnight posted a $2 advance in chemical grade (99.9 percent) KCl, but there has been no favorable response from other producing quarters. At least one producer seemed set to hold prices steady.

Nonferrous Metals

Silver—Price has been long unchanged at 91⅜c. a troy ounce, spot.

Tin—The boom continues. Straits metal closed last Friday at $1.12 a pound, down one cent from the previous week's record high.

Zinc—Increased shipments and a further reduction in industry stocks featured the market in May, as reported by American Zinc Institute.

Total shipments (including foreign) were 79,599 tons, as compared with 76,733 tons in April. Production amounted to 73,632 tons, as against 72,865 (revised). Stocks closed at 213,054 tons, down from 219,021.

Production for the year to date stands at 372,066 tons; monthly average output at 74,413; monthly average shipments at 69,964, and daily average output at 2,464 tons, AZI reports.

Heavy Chemicals

Production breakdown for May was as follows:

- Special high grade, 28,021 tons, as compared with 32,883 in April.
- High grade, 8,265 tons, as against 4,868.
- Intermediate, 984 tons, as against 426.
- Prime western (including select and brass special), 36,362 tons, as against 34,688.

Heavy Chemical Briefs

CAUSTIC POTASH OFFERED: What is described as an exceptionally pure grade of caustic potash is now available from A & S Corporation, Randallstown, Md. Material is offered in pellets for laboratories and in flakes for industrial uses. Sulfates are less than 0.005 percent; iron and chloride less than 0.001 percent, the company reports.

HYDRATED ALUMINA: Aluminum Company of America has begun production of an improved form of fine particle-sized hydrated alumina in a new facility at Bauxite, Ark. Known as the C-700 series, the new line is moving into pigments, paper coatings, plastics, rubbers. The hydrates also serve as reagents in production of aluminum chemicals.

Biddle Sawyer Moving

Biddle Sawyer Corporation is moving from its present location at 20 Vesey street to larger and more modern quarters at 64 Wall street, New York 5. The move takes effect July 5. New telephone number is HAnover 2-6350.

Kefauver Drug Bill

—Continued from page 4

companies in the United States pharmaceutical industry to the level of their counterparts in the Soviet Union, which merely copy what others have invented."

Mr. Connor contended that the legislation would "remove both the encouragement and the protection of patents from the search of new drugs" and "would stop in midstream many of the most promising inquiries into the nature and control of illness."

It would do this, he explained, by cutting the exclusive term of a drug patent from seventeen years to three.

A second provision would start the three-year term at the time a drug is placed on the market. This would render the three-year protection meaningless, the Merck president said, because in most cases patents are not issued for three years or more after a drug goes on the market.

A final provision would require compulsory licensing of all competitors here and abroad, including the surrender to them of all know-how, Mr. Conner pointed out.

This, in his opinion, would force a company that discovered a new drug "to subsidize free-loaders" who "would have contributed nothing to the research, shared none of the risks and paid for none of the original costs."

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Sulfur Output Via Bacteria? A Possibility: Mines Bureau

Production of sulfur and sulfuric acid by means of bacteria? That's a definite possibility, according to Bureau of Mines research in the field of microbial metallurgy (the use of bacteria to alter minerals).

Bacteria, according to the bureau, "may prove important in the selective separation of metals from ores and metallurgical solution, the production of sulfur from gypsum or pyrites, and the production of sulfuric acid from elemental sulfur."

Other metallurgical activity by bacteria is harmful, however, the bureau adds. Premature failure of flashlight batteries may be caused by "nitrifying bacteria."

Also, thousands of dollars worth of mining equipment is destroyed each year by acids formed by iron- and sulfur-oxidizing bacteria in active and abandoned coal mines of Pennsylvania and West Virginia, the bureau says.

Current Market Quotations

—Continued from page 37

Zinc chloride, NF, gran., dms..	lb.	.42	- —
NF, precip., powd., dms	lb.	.36	- —
Tech., soln., 50%, dms., c.l., works 100 lbs.		5.80	- —
dms., l.c.l., works 100 lbs.		6.40	- —
tanks, works 100 lbs.		5.15	- —
fused, dms., c.l., works 100 lbs.		10.70	- —
dms., l.c.l., works 100 lbs.		11.20	- —
Zinc Chloride, tech. gran., fib. dms., c.l., works 100 lbs.		11.45	- —
fib. dms., l.c.l., works 100 lbs.		11.95	- —
Zinc chromate bbls., dlvd.	lb.	.29	- —
Basic bbls., dlvd.	lb.	.34	- —
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust coml. bbls., c.l., works	lb.	.16	- —
Pigment, bbls., c.l., works	lb.	.15½	- —
bbls., l.c.l., works	lb.	.17¼	- —
Zinc fluoride, bbls., works	lb.	.49	- .50
Zinc hydrosulfite, dms., c.l., frt. alld.	lb.	.21½	- —
dms., l.c.l., frt. alld.	lb.	.23½	- —
Zinc metal, prime western, slabs, E. St. Louis	lb.	.11½	- —
Prime western slabs, New York	lb.	.12	- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld.	lb.	.27	- —
10% Zn., dms., frt. alld.	lb.	.33	- —
Zinc nitrate, tech., flake, 100-lb. fib. dms., l.c.l.	lb.	.16½	- —
300-lb. fib. dms, l.c.l.	lb.	.14½	- —
300-lb. fib. dms., c.l.	lb.	.14	- —
Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b. works	lb.	.12½	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.13	- —
bgs., l.c.l., smaller lots, same basis	lb.	.13½	- —
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b. works	lb.	.14	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.14½	- —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis	lb.	.14½	- —
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works	lb.	.14½	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	- —
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.14½	- —
red seal, bgs., c.l., same basis	lb.	.14	- —
Zinc oxide, French process, white seal, bgs., l.c.l., 10 tons or more, same basis	lb.	.15	- —
bgs., l.c.l. smaller lots, same basis	lb.	.15½	- —
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.14¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15½	- —
bgs., l.c.l., smaller lots, same basis	lb.	.15¾	- —
Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld.	lb.	.15¾	- —
50 lb.-dms., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
50 lb.-dms., l.c.l., smaller lots, same basis	lb.	.16¾	- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	- .46
NF, powd., dms.	lb.	.48	- .49
Zinc resinate, precip. 7.2-7.6% Zn., dms., frt. alld.	lb.	.45	- —
Zinc silicofluoride dms. works	lb.	.12½	- .14
Zinc stearate, USP, ctns., c.l.	lb.	.41	- —
	lb.	.41	- —
ctns., l.c.l.	lb.	.43	- .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.	100 lbs.	5.60	- —
bgs., l.c.l., dlvd. E.	100 lbs.	5.85	- —
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530	- —
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04	- —
Zinc, yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb.	.26	- —
Normal, 250-lb dms., frt. alld	lb.	.25	- —
Zircon (G) gran. bgs. c.l. works	lb.	.03½	- —
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03½	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Zircon (G) milled, bgs. c.l., works	lb.	.04½	- —
bgs., 5 tons to c.l., works	lb.	.04½	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04½	- —
bgs., 500-1,999-lb. lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms., c.l. 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride powd. electronic grade, dms., works	lb.	14.00	- 15.00
Zirconium oxide, CP, white, grd., bbls. or bgs. works	lb.	1.90	- —
Electric-fused lump, bgs., 500 to 1,999-lb lots, works	lb.	.48½	- —
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l., works	lb.	.52	- —
bgs., 5-ton lots, works	lb.	.52½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.53½	- —
bgs., 500 to 1,999-lb. lots, works	lb.	.54	- —
bgs., smaller lots, works	lb.	.56	- —
Glass polishing grade, 94-97% ZrO_2, bgs. works	lb.	.55	- .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	- .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.52	- .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	- —

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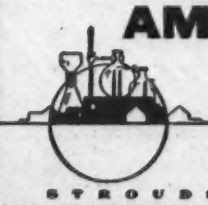

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Erco Nearing Completion Of Ontario Fertilizer Unit

A multi-million dollar chemical plant rising at Port Maitland, Ontario, on Lake Erie, will be brought on stream by Electric Reduction Company within a month.

Erco, based in Toronto, has been under way on construction of the plant for about one year. The facility will turn out phosphoric acid and triple superphosphate for fertilizers, and dicalcium phosphate as a mineral supplement for stock foods.

Production capacity of these plants will be sufficient to serve more than the present Canadian requirement and a portion of the US market as well, the company says.

Erco has been producing single superphosphate for fertilizer use at the plant of its subsidiary, Dominion Fertilizers Company, adjacent to the main Erco site at Port Maitland.

FTC Out After Drugs

—Continued from page 3

forcer" they need to police proprietary drug advertising.

Now, the agency will require suspect concerns to submit all pertinent data relative to a pending investigation. That is, as one Washington wag puts it, "it will give the companies the opportunity to confess by mail."

Previously, the commission had to send a team of investigators out into the field to collect the needed information, a laborious task entailing much time and manpower.

Here's how the new procedure is working in the hemorrhoid probe: Letters are going out to all sellers of the preparations asking for (1) samples of all ads for the past six months and (2) their brand formulas.

Where there are seeming abuses, FTC will follow up with section 6 orders to the suspected offenders demanding such information as this:

Data Sought by FTC

Corporate data (officers, financial statement, plant locations, products, etc.), formula of the drug product under investigation, advertising, ad agency data and technical information on the product.

Companies have sixty days in which to file a report. If none is forthcoming, FTC will issue a notice of default. The defaultee will then have another thirty days. And, then, the agency will exact the penalties as prescribed in the FTC act.

Any company so falling from grace will, of course, have the opportunity to appeal the commission's decision to a Federal District Court.

FTC officials point out that in some instances the violations are obvious and the agency here will quickly put into effect a section 6 order. This, in fact, happens to be the case for some hemorrhoid preparations and several orders have already gone out to the sellers.

For the moment, FTC is concentrating on proprietaries. Authority to oversee ethical drug advertising is given the commission in the Dingell bill, which is now pending in congress.

The Dingell measure would require a prescription drug ad to provide warnings of the drug's side effects, precautions about its use and a truthful statement of its formula.

The legislation, still awaiting hearings, appears to be getting nowhere at the moment. However, FTC is backing the bill, and this support might just give it the shove it needs to get the measure through the congress.

FTC-FDA Jurisdictional Pact

FTC's determined push into drug ad policing may put some strain on an agreement it has had with Food & Drug Administration since 1954.

The pact drew the boundary lines between the two agencies as to their jurisdiction over various aspects of the promotion of food, drugs, cosmetics and medical devices.

FTC took responsibility for false and misleading advertising, while FDA took charge of false labeling and packaging.

FDA says it has been posted on the FTC hemorrhoid probe, and that, as far as its baliwick is concerned, it sees no reason to question the labeling of the preparations.

Pennsalt's Alkyl Amines

—Continued from page 3

cially in 1938. The present process was installed in 1948 and enlarged in 1952. A modification in 1956 improved distillation throughout.

In 1958 Pennsalt built a separate unit to make methylamines. The most recent addition, completed late in 1960, was a separate facility for producing alkyl alkanol amines.

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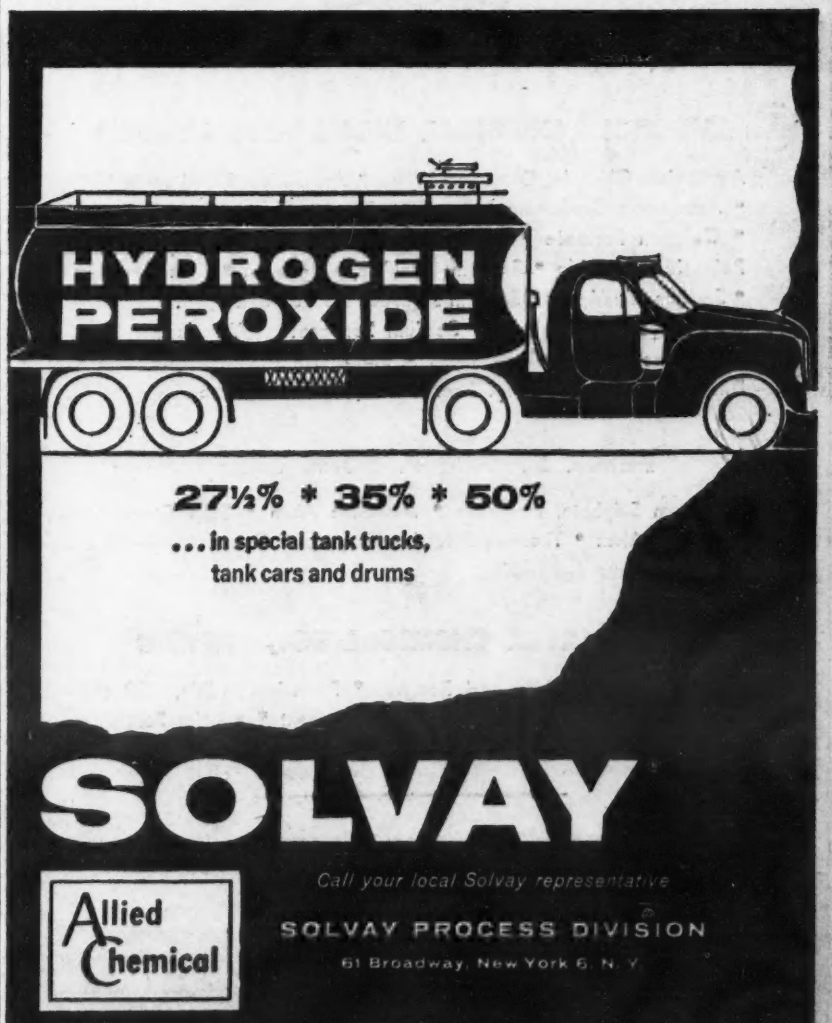

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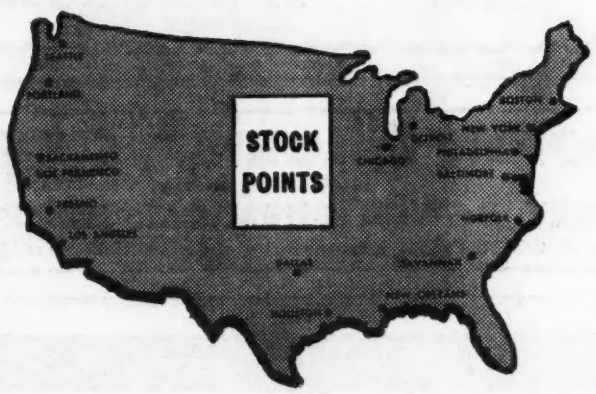

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Sulfur News Has Both Good and Bad Aspects

—Continued from page 7

between 400,000 and 500,000 long tons by 1965-66."

India's sulfuric acid industry, which now operates almost wholly on imported sulfur, consumes approximately three-quarters of the 140,000 long tons/year of imports.

In turn, fertilizer manufacture takes two-thirds of the sulfuric acid produced. In fact, most Indian acid capacity is found in association with fertilizer factories.

The Indian authorities are endeavoring to meet some of the growing demand from domestic sources but geologists have not so far uncovered commercial deposits of elemental sulfur.

Hopes on Gypsum Pyrites

Resources of sulfide ores and sulfur-bearing natural gas are also meager. The government, therefore, bases its main hopes on gypsum and pyrites, especially the latter.

At Amjor in Bihar State a fairly extensive pyrites ore body has been proven up. The government has announced that it will develop this ore body as a Third Five-Year Plan project. Plans call for extraction of sulfur at the rate initially of 200-300 long tons a day.

The Fertilizer Corporation of India Ltd.'s Sindri plant uses gypsum directly instead of sulfuric acid in its production of ammonium sulfate and this gypsum process is planned for one or two other proposed plants. India's gypsum resources, however, are by no means unlimited.

It is doubtful whether exploitation of the Amjor deposits, even supplemented by more intensive use of gypsum, sulfide ores, cokeoven gas, etc., could produce as much as 200,000 long tons a year of sulfur in elemental or contained forms.

Adoption of fertilizers that do not require sulfur is possible only to a limited extent. Imports therefore will have to double or triple during the Third Five-Year Plan if fertilizer production is to attain the targets set for it.

State Unit Handles Imports

On another front, it is noted that India handles imports of fertilizers through the State Trading Corporation, a government entity. The unit is the only importer of sodium nitrate, muriate of potash, ammonium sulfate, and ammonium nitrate, except for the government purchases by tender.

This is the second report on India's fertilizer industry from the Canadian Department of Trade & Commerce. The first appeared in the May 29 issue of OPD.

State Trading's purchases of fertilizers in 1958-59 totaled 77,000 long tons, mostly muriate of potash from Germany.

Both the United States and Canada have financed a considerable volume of imports through their aid programs. Since 1951 the United States has supplied approximately 500,000 tons of nitrogenous fertilizers, plus, in 1958, 13,000 tons of triple superphosphate and other higher phosphates to introduce these fertilizers on an extensive scale.

As part of its 1958-59 and 1959- 60 Colombo Plan programs, Canada made available to India about 100,000 long tons of ammonium sulfate and 10,000 of ammonium phosphate, it is recalled.

Continued imports of nitrogenous fertilizers will probably be necessary for several years. In the long run, however, the government clearly intends that India's requirements be met entirely from domestic production. This limitation applies also to phosphate fertilizers.

The best long-term prospect for Canadian firms therefore lies in potash fertilizers. Only about 1,500 tons a year of low-grade potash is produced from Indian salt bitterns and little expansion seems possible. In its Third Five-Year Plan, the government bases its potash consumption intentions (200,000 long tons a year in terms of K_2O by 1961-66) on imported potash.

Chemical Industry Unhappy

—Continued from page 5

government by the amount of deductible interest payments to investors."

On the question of travel and entertainment expenses, Mr. Hull concedes that there have been abuses by industry, but he feels that "what is needed is more effective audit in the areas of demonstrated abuse" rather than broadly restrictive legislation.

The $30-a-Day Limit

He views the $30-a-day limit on business travelling expenses as "arbitrary and under some conditions inadequate." Since business conferences at meal times are customary on such trips and these require more expensive arrangements, he contends that "a higher expenditure could be shown to be ordinary and necessary from a business standpoint."

MCA's outright rejection of the administration's tax credit scheme flies in the face of a frank bid for industry support of the idea by Secretary of Commerce Luther H. Hodges.

Speaking at the association's annual meeting in White Sulphur Springs, W. Va., last fortnight, the Commerce Secretary maintained that the chemical industry "would benefit substantially" from the plan.

This, he said, is particularly so for chemicals, which leads the nation in per-worker capital investment ($30,000 per worker in 1957 against $19,591 for the runner-up, motor vehicles).

"This proposal," he explained, "would allow a company to subtract from its final tax bill an amount equal to a percentage of its new investment in plant and equipment.

"It could also claim a 6 percent credit on the portion of new investment between 50 and 100 percent of its yearly write-off for depreciation depending on existing plant and equipment.

The Minimum Credit

"And as a minimum credit, a firm could take 10 percent of its first $5,000 of new investment.

"All of these credits would be treated as an offset against the firm's tax liability, up to an overall limitation of 30 percent in the reduction of that liability in one year."

Mr. Hodges asserted that the President has made it clear that the proposal is not a substitute for other measures.

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Aliphatic Organics

Is more adipic acid production on the way? Trade sources think so. They say a major chemicals producer is set to put up a plant in the vicinity of Louisville, Ky., and figure it will be in the 20-million-pound-a-year class. Rumored also is that the firm has contracted for 3 million gallons of cyclohexane—its initial annual raw material requirement, presumably—from a Texas producer. Further speculation finds output of the new facility going into captive operations—primarily synthetic lubricants manufacture, a 4 million pound market for adipic acid currently.

Far and away the major outlet, however, is nylon-66, to which 290 million pounds of the acid were channeled last year. Accounting for the remainder, according to a recent estimate, were adipate plasticizers, 18 million pounds; polyesters for urethane foams, 8 million pounds, and miscellaneous uses, 6 million pounds.

Of today's four adipic acid producers, two use phenol as starting material and two use cyclohexane. One of the latter supplies 50 percent of its requirement internally and buys the rest, while the other firm is strictly an open-market purchaser.

Should a fifth firm get in the business with a 20-million-pound-a-year plant, as speculated, adipic acid capacity would rise to approximately 420 million pounds. Temporarily, at least, this would represent an excess and either or both of today's two solely merchant producers of adipic could be hurt.

In a rather surprising development last week, the price of vinyl chloride monomer was reduced to 7½ cents a pound. Previous listing, at least officially, was 8.96 cents a pound. Some trade people are betting that the higher schedule will be once again on the books by summer's end.

Formally announced last week by a rapidly growing chemical concern was a $15 million building program. It includes the erection of methanol and vinyl acetate monomer facilities at Geismar, La., where the firm and its partner are building acetylene and vinyl chloride monomer plants.

Acetonitrile—Contract buyers of acetonitrile will be paying an additional 3c. a pound for the chemical starting July 1. The change is already effective to spot purchasers.

New schedule lists tankcars at 35c. a pound, carloads of drums at 37½c. a pound and lesser quantities at 39c. a pound, freight allowed.

Higher prices reportedly reflect increased manufacturing and shipping costs.

Ethyl Alcohol—From a mere 550,000 gallons in March, imports rose to 6,654,257 gallons in April. The entire quantity was valued at $1,399,280 and dutied at $425,209.

Port of entry for most of this material was Philadelphia. Commerce department statistics show that 3,830,065 gallons of ethanol (valued at $838,915 and dutied at $287,255) were brought in there from Brazil. In addition, 1,063,279 gallons (valued at $223,288 and dutied at $14,210) came in from Peru.

Brazil was the origin of the 1,649,913 gallons of ethanol (valued at $337,077 and dutied at $123,744) that were brought in at Galveston, Tex., in April.

Ethylene Amines—A major chemicals firm is now adding to its existing production capacity for ethylene diamine, diethylene triamine, triethylene tetramine and tetraethyl pentamine.

Expansion of facilities is being undertaken now, a company spokesman says, because it is an "advantageous time to prepare for the foreseeable growth of ethylene diamine and the higher ethylene amines."

Leading markets for these chemicals include agricultural products, crease-resistant resins for textiles, sequestrants, surfactants, and polyamide resins.

Hoping to encourage market growth and the development of new end uses, the firm on June 7 reduced prices for ethylene diamine 2c. a pound. Resulting schedule for the eastern territory on a contained ethylene diamine basis is as follows:

Tankcar, 38c. a pound; a carload of drums, 40c. a pound; less than a carload, 41.5c. a pound. All prices are freight allowed. Standard one cent per pound differential in the Western territory.

Glycerine—Glycerine production rose from 60.6 million pounds in March to 63.5 million in April but in the same period disappearance fell from 23.8 to 22.3 million pounds.

For the first four months of 1961, output was 103.8 million pounds, disappearance 87.5 million, imports 6.6 million, and exports, 3.9 million.

In the comparable period in 1960, production was 103.8 million pounds, disappearance 93.9 million, imports 4 million, and exports, 7.3 million.

At the end of April, stocks held by producers totaled 67.2 million pounds. This compared with 44.7 million pounds on April 30, 1960.

Methanol—Erection of a 25-million-gallon-a-year methanol plant at Geismar, La., has been slated by a relatively young but fast-growing chemical firm. Output of the new facility will be used captively in the manufacture of formaldehyde, presumably.

Another firm recently announced that it was expanding its methanol production capacity and it's assumed that this expansion reflects the potentially large market for polyformaldehyde resins.

Perchloroethylene — Imports of perchloroethylene in April amounted to 5,921,780 pounds, valued, according to Commerce department reckoning, at $444,467 and dutied at $26,669.

Shipping to the US were: Italy 2,993,754 pounds, valued at $229,278 and dutied at $13,757; Belgium, 1,854,829 pounds, valued at $131,250 and dutied at $7,875; France, 1,031,797 pounds, valued at $81,135 and dutied at $4,869; and Canada 41,400 pounds, valued at $2,804 and dutied at $168.

Sorbitol—Within a year, there will be a new firm in the sorbitol business. Its plant will be located in Illinois and it will be capable of turning out a minimum of 20 million pounds yearly.

A source of constant joy (and profit, presumably) to a current producer, sor-

Price Trends

Advanced

None

Reduced

Vinyl chloride monomer, 1.46c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	June 17, 1960
130.26	130.27*	130.29	132.19

* Revised.

For Current Prices See Page 10

Aliphatics Foreign Trade: April

Imports of selected industrial aliphatic organics for March and April 1961, as reported by the Bureau of Census, were as follows:

		April	March
Acetic acid (over 65 percent)	lbs.	210,660	563,240
Acetic anhydride	lbs.	224,670	72,680
Amyl, hexyl, propyl alcohol and fusel oil	lbs.	49,040	0
Carbon tetrachloride	lbs.	105,500	479,660
Chloroacetic acid and anhydride	lbs.	859,869	833,043
Ethyl alcohol	gals.	6,543,257	550,000
Formic acid and anhydride	lbs.	81,331	6,680
Furfural	lbs.	3,560,704	3,571,942
Glycerine, crude	lbs.	1,454,934	3,814,406
Refined	lbs.	7,280	3,920
Lactic acid (55 percent or more by weight)	lbs.	53,111	15,065
Perchloroethylene	lbs.	5,921,780	2,180,734
Tetrachloroethane	lbs.	0	0
Trichloroethylene	lbs.	2,026,408	3,028,546
Vinyl acetate, unpolymerized	lbs.	3,231,023	4,049,230

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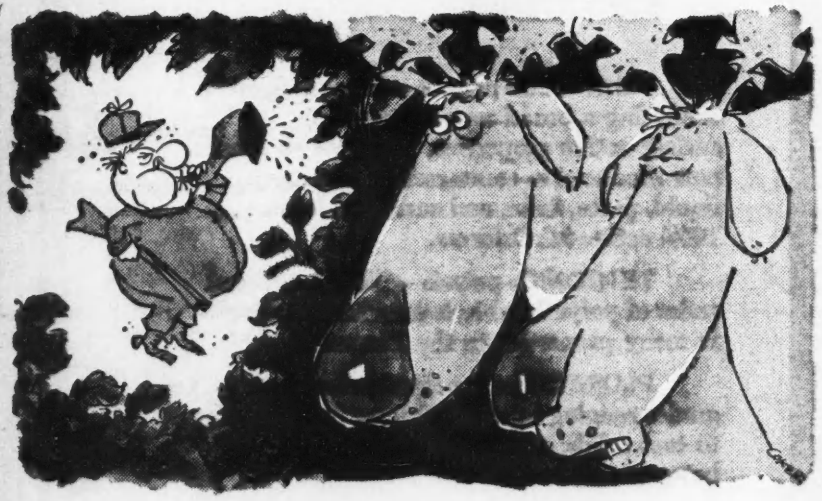

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Aliphatic Organics

bitol is apparently a growth item. There is today an estimated 90 million pounds of capacity available.

Trichloroethylene — April imports totaled 2,026,408 pounds and were valued at $128,481 and dutied at $9,637. Sources: United Kingdom, 2,020,720 pounds, valued at $126,945 and dutied at $9,521, and West Germany, 5,688 pounds, valued at $1,536 and dutied at $116.

Vinyl Acetate—More vinyl acetate monomer production is on the way. A rapidly growing chemical concern disclosed last week that it was putting up a 50-million-pound-a-year facility at Geismar, La.

Except for acetic acid, which it will purchase, requisite raw materials will be supplied by adjacent plants of which the firm is a joint owner.

OPD had anticipated the announcement and in a recent "in depth" report predicated 1963 capacity of 545 million pounds (current US and Canadian capacity: 391 million pounds) on this and two other expansions. Both of these are also expected to be in the 50-million-pound-a-year class.

Although consumption of vinyl acetate monomer has grown steadily and is expected to continue at a very respectable rate, there is still going to be considerable surplus capacity. Keen competition is thus to be anticipated and perhaps a price cut will result.

April imports of vinyl acetate monomer amounted to 3,231,023 pounds and were valued at $511,668 and dutied at $72,364. Shippers, the Commerce department reports, were: Canada, 3,218,000 pounds, valued at $507,301 and dutied at $71,928; West Germany, 11,023 pounds, valued at $3,175 and dutied at $336; and Japan, 2,000 pounds, valued at $1,192 and dutied at $100.

Imports of polymer the same month totaled 120,725 pounds and were valued at $54,093 and dutied at $4,886. Suppliers were Japan, West Germany and Canada.

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Agricultural Chemicals

Fertilizer Year Around the Corner, But Where Is the Pattern on Price?

With the start of the fertilizer year just a few weeks off, the industry has failed to set a consistent pricing pattern for many of the fertilizer materials. Up for grabs are the prices for urea, and ammonium nitrate as well as the drive to end the seasonal discounting on the nitrogenous fertilizers. Add to that a recent break in the listings on potash and a curious pricing on manganese sulfate, and one has a situation that, while confusing, is certain to keep Kefauver's bloodhounds from nosing around this sector of the chemical industry.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 17, 1960
117.69	117.70	111.70	109.97

For Current Prices See Page 10

In recent weeks, the trade has seen efforts to raise urea prices checked by an ambitious plan to tailor urea marketing after ammonium nitrate. Besides a zone system for urea marketing, the producer's schedule would extend discounting to all of the nitrogenous fertilizers, including urea. For the first part of the fertilizer year, the zoned urea market would not see any price increase.

Since only three producers have announced new schedules for the season, the majority of the nitrogenous fertilizer manufacturers are as yet non-committed. Usually, producers advise their customers as to price changes two weeks before they become effective. As of last week, no announcements were received and it seems likely that many producers will be carrying current listings on their books at least until the middle of July.

July 1 Price Advances

p-Dichlorobenzene, 1c. per lb.
Manganese sulfate, 75 percent, $10 per ton
Potash, 2c. per unit-ton

Potash listings, which are usually immune to last minute price maneuvering, slipped a notch when one producer posted a revised schedule for coarse/granular muriate. Others in the trade are reported to be meeting the revised schedule.

The 3 cent difference in the listings between standard coarse muriate was made to attract customers to standard material. In recent years, potash producers have found that coarse and granular potash has gained in popularity. Now instead of the 3 cents a unit spread between the two grades, there will be a 1.5 cent a unit difference.

Manganese sulfate, a plant nutrient used primarily in Florida on citrus fruits, will be boosted $10 a ton by one producer on July 1. An interesting aspect of the price boost is that it will close the gap between two producers' listings on manganese sulfate. One producer currently offers 75 percent material at $75 a ton, while another markets a 65 percent grade at $86.50. Thus providing another example of the individuality in pricing of the agricultural chemicals.

Animal and Plant Foods

Ammonium Sulfate—Supplies of ammonium sulfate are reported to be out of the tight position that checked demand earlier in the season. Wet weather throughout the nation this Spring prevented farmers from large-scale fertilizer applications and reduced shipments drastically.

The improvement in the domestic supply situation showed up in import figures as inshipments of ammonium sulfate dropped from 35,701 short tons in March to 19,752 short tons in April.

Animal Proteins—Declines in the animal proteins market did not extend to fishmeal and scrap. Market continued at $112 for meal with the usual discount of $4 a ton on scrap, on the basis of bagged material, Atlantic and Gulf coasts.

Imports of fishmeal totaled 4,056 short tons in April, as against 7,282 short tons in the previous month. As usual, the largest shipments were from Peru which accounted for 3,986 short tons.

Potash—According to revised schedules, the coarse grade of muriate of potash will be 36.5 cents per unit K_2O during July-August, 37.5 cents per unit during September-October, 38.5 cents in November through January 1962 and 41.5 cents during February-June, 1962. The original schedules called for a price of 38 cents a unit for the two months of the fertilizer year.

Bulk shipments of coarse potassium chloride was to be offered at 38 cents a unit-ton K2O. One producer plans to offer that grade at 36.5 cents a unit, and the latter price seems likely to hold.

Imports of potassium chloride totaled 33,065 short tons in April as against 49,864 short tons in March. West Germany and France were the leading suppliers with Germany shipping 14,760 short tons ($418,105) and France, 11,140 short tons ($380,215). Russia, who has been shipping potassium chloride on and off in the last few years, added 551 short tons in April. The remaining 6,614 short tons originated in Spain.

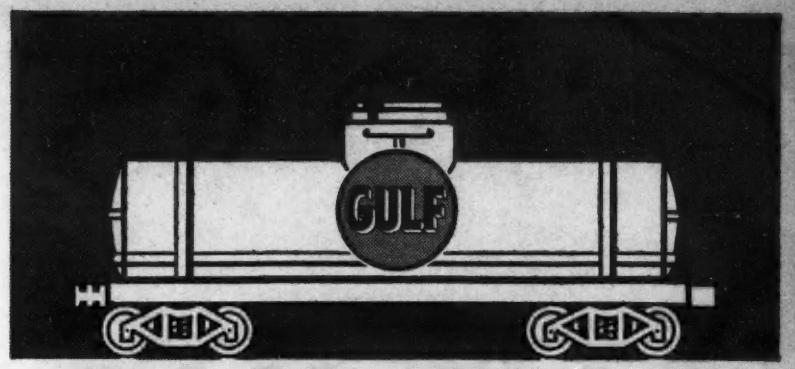
Manganese Sulfate—One producer will boost listings $10 a ton on July 1. The high cost of manganese metal was cited as the reason for the increase. Manganese sulfate is used on soil that is manganese deficient. Leading state for manganese sulfate is Florida, where the soil is reported to be low in available manganese.

Sodium Nitrate—The high rate of shipments made during the first three months of the year as a result of a strike that piled up material in Chile is returning to normal. In April, 11,077 short tons entered the US, as against 100,000 tons shipped during February and March.

Farm Chemicals Imports: April

Following are data compiled by the Bureau of Census indicating volume of imports of agricultural chemicals for March and April 1961. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. All figures are in short tons.

	March	April
Ammonium nitrate (over 32 percent N)	20,132	15,249
Ammonium nitrate (32 percent N or less)	33,452	2,147
Ammonium phosphate	10,277	12,318
Ammonium sulfate	35,701	19,752
Calcium cyanamide	5,225	1,940
Castor bean pomace	1,317	331
Dried blood	206	278
Fishmeal and scrap	7,282	4,056
Guano	43	5
Nitrogen Solutions	7,113	6,917
Peatmoss (fert. grade)	40,777	35,367
Phosphates, crude[2]	20,349	21,689
Potassium chloride, crude	49,864	33,065
Potassium nitrate, crude	(—)	70
Potassium sulfate, crude	11,106	11,969
Sodium nitrate, crude and refined	53,234	40,284
Urea	11,683	11,077



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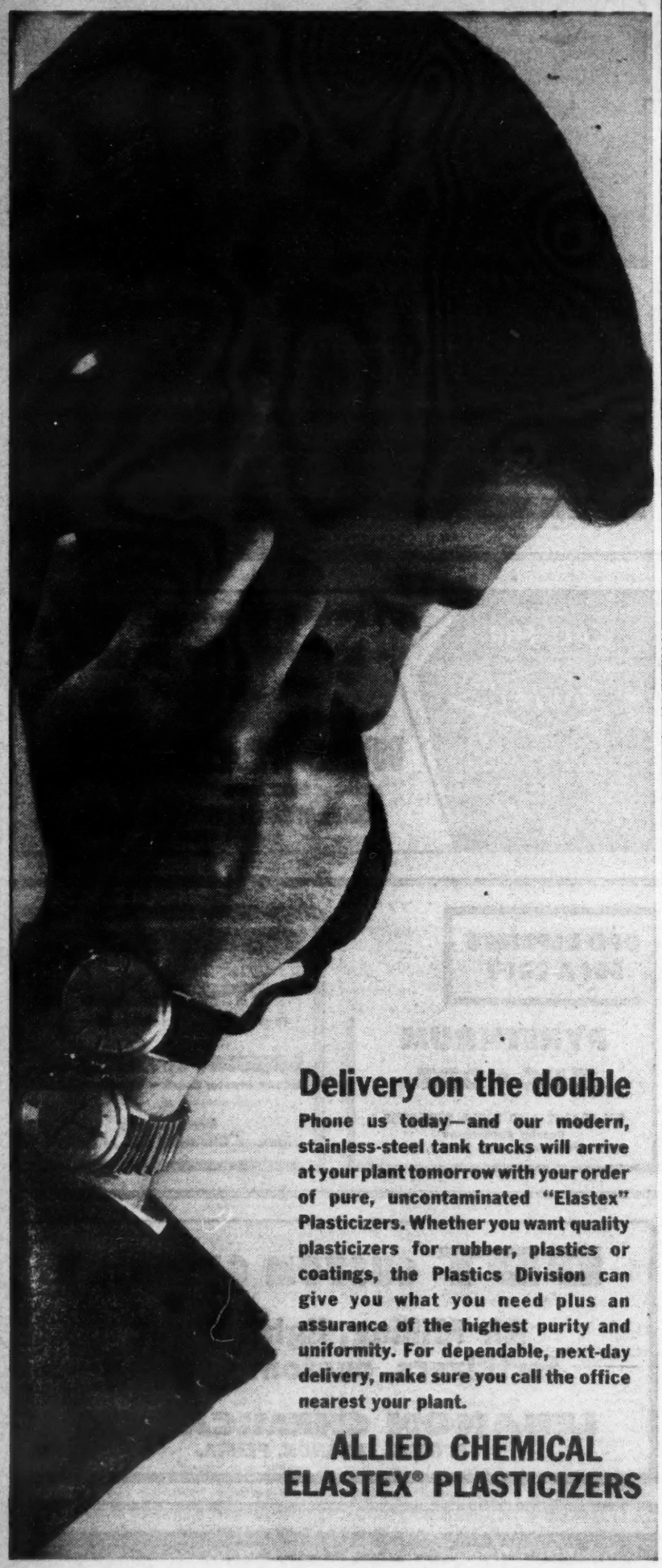
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Coal Chemicals

Up on July 1 will go prices for five intermediates. Following are the chemicals and the increases as disclosed late last week by a major producer: 4-amino-azo-benzene-4'-sulfonic acid, 12 cents a pound; p-aminophenol, 10 cents a pound; 2-aminotoluene-5-sulfonic acid sodium salt, 5 cents a pound; Cleve's acid 1,7, 22 cents a pound, and o-naphthionic acid, 20 cents a pound. April foreign trade results continued to reflect trends in the domestic market. At the first of the year benzene displayed the tightness which had existed since the steel strike a year earlier. But with steel rate improved, petroleum facilities coming on stream and existing plants churning out material, the market began to have its needs met. As domestic supply improved benzene imports, which had begun to decline late last year, fell even more sharply. Up went volume of exports, however, on the basis of a more freely supplied US market. Through April exports nearly doubled (14.5 million gallons vs. 7.6 million gallons) the pace set last year in the same period. Meanwhile, imports fell to 4.3 million gallons through April as against 10 million last year.

Reversed was the naphthalene foreign trade picture. A tightened US market and more abundant supplies abroad, plus the hefty premium for imported naphthalene swelled the flood of foreign material entering US ports this year.

In the first four months 32.3 million pounds arrived, equivalent to one month's US output at current production rates and more than double the 14.2 million pounds of imports which arrived last year through April. Needless to say no naphthalene was exported.

July 1 Price Advances

p-Dichlorobenzene, 1c. per lb.
4-Amino-azo-benzene-4'-sulfonic acid, 12c. per lb.
p-Aminophenol, 10c. per lb.
2-Aminotoluene-5-sulfonic acid sodium salt, 5c. per lb.
Cleve's acid 1.7, 22c. per lb.
Naphthionic acid, 20c. per lb.
Styrene monomer, tech. grade, 1/100c. per lb.

For foreign suppliers the bonanza appears to be ending, however. Future prices have fallen sharply. From the 15 cents to 15½ cents a pound level paid last year, offers for the near term are 9½ cents to 10 cents a pound. Shipments for late this year as being offered at 9 cents while first quarter arrivals next year are being tendered at 7½ cents to 8 cents.

Even at these prices, cut rate as they may appear in the light of former import offerings, few takers for distant future dates are noted. This is indicatvie that naphthalene supply is expected to be adequate by first quarter next year.

Basic Products

Benzene—In fairly adequate supply, material is moving into normal outlets with some standout applications noted.

One is styrene monomer.

Polystyrene is active and so is synthetic rubber business. Tire shipments are reported at peak levels despite record-high dealer inventories only weeks ago.

Benzene producers say 34c. is still the going price for contract material. Spot price, with some exceptions, is 34c., too. Exceptions are for extra freight costs to spot customers located off the beaten track.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 17, 1960
117.90	117.90	117.64	118.40

For Current Prices See Page 10

Naphthalene—Supply remains tight.

Some easing has been noted on occasion but not enough to bring encouragement to naphthalene consumers.

Responsible for this marginal improvement is the increased flow of imports from Europe.

Currently arriving at about one-third the domestic production rate, imported naphthalene is steadily dropping in price.

Latest offers are ranging 9.5c. to 10c.

Offers for later this year are approximately 9c.

One report indicates that first quarter 1962 offers are 7 to 8½c. a pound.

These quotes are considerably below previous prices but still represent costs much higher than is profitable for American phthalic producers.

Some trade sources are of the opinion that the import market will play a less significant role in the supply picture towards the end of the year.

New supply from domestic sources will close the gap, observers believe, creating a balanced market. European sellers are aware of this as their considerably lower future quotes indicate.

Naphthalene imports continued at heavy volume in April at 11,154,633 pounds although this figure represents a decline from March arrivals of 12.4 million pounds.

Value of April imports was placed at $1,480,486 by Tariff Commission, or an average of 13.3c. per pound.

Phenol—Market sources report phenol sales are moving well overall.

Natural phenol is brisk on the basis of phenolic resins output.

Synthetic phenol is indicated at moving at a better rate than last fall.

Prices are unchanged.

Production of phenol, both natural and synthetic is at a pace not too far off last year.

In the first quarter 182.6 million pounds of phenol were turned out as against 198.3 million pounds in the same period of 1960.

Intermediates

A major chemical producer is boosting the price of five intermediates effective July 1.

Up will go:

4-Amino-azo-benzene-4'-sulfonic acid to $1.27 a pound, an increase of 12c.

Aromatic Chemicals Foreign Trade: April

Following statistics are compiled from Census Bureau reports.

	April 1961	April 1960	First Four Months 1961	First Four Months 1960
EXPORTS				
Benzene ....gals.	3,278,778	3,971,726	14,454,938	7,557,450
Coaltar, crude and refined ....gals.	9,815	49,850	51,055	152,632
Creosote or dead oil....gals.	10,680	5,500	38,094	12,808
Cresols and cresylic acids ....lbs.	3,107,639	954,693	9,506,673	3,710,130
Phenol ....lbs.	3,427,090	3,227,339	8,856,203	12,072,425
Phthalic anhydride ....lbs.	281,178	2,589,234	915,738	4,909,879
Styrene monomer ....lbs.	6,899,854	21,517,583	40,748,683	65,401,065
Toluene ....gals.	1,046,023	6,647,680	11,887,125	15,344,607
IMPORTS				
Benzene ....gals.	0	0	4,256,911	10,035,293
Creosote and dead oil ....gals.	2,453,841	588,872	12,205,484	11,385,809
Cresols and cresylic acid, ADF....gals.	200,265	345,003	313,539	821,692
Naphthalene, melting point less than 79° C ....lbs.	11,154,633	3,072,257	32,306,221	14,227,284

Coal Chemicals

p-Aminophenol to $1.25 a pound, an increase of 10c.

2-Aminotoluene-5-sulfonic acid sodium salt to 75c. a pound, an increase of 5c.

Cleve's acid 1,7 to $2.42 a pound, an increase of 22c.

o-Naphthionic acid to $2 a pound, an increase of 20c.

o-Dicholorobenzene — Sales are reported moving along at a good clip.

Supply is no problem producers say. In fact drum sales are actively sought. Solvent use predominates the market with insecticide use trailing far behind.

Prices are unchanged at 11c. a pound in tanks, freight allowed east, 12¾c. a pound for drums, carlots, same basis, and 13¾. a pound for drums, lesser quantities, same basis.

Monochlorobenzene—Reported in good demand earlier this year for DDT formulations, MCB is still subject to satisfactory calls according to producers.

While supply was a bit tight in the first quarter due to the benzene shortage, inventories are reported adequate now.

Price is unchanged at 8¾c. a pound in tankcars.

With reference to end use, DDT season has been delayed by chilly weather and reluctance on the part of farmers to apply pesticides until infestation commences with the advent of hot weather.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended June 10, were as follows:

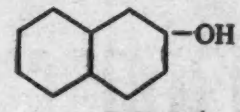
Ammonia liquor	lbs.	610,272
Ammonium sulfate	lbs.	25,976,847
Benzene	gals.	2,796,038
Coaltar	gals.	1,411,695
Crude chemical oil	gals.	552,699
Solvent naphtha	gals.	92,116
Toluene	gals.	621,756
Xylene	gals.	172,732

BETA NAPHTHOL

CHEMICAL NAME: 2-Naphthol

GRADE: Technical

FORMS: Powder and Flakes



$C_{10}H_7OH$
MOL. WT. = 144.2

DESCRIPTION: White to pinkish-white or grayish-white powder or flakes which darken on exposure to air or light. Characteristic odor.

SPECIFICATIONS:

Freezing Point (Dry)	120.8°C. Min.
Foreign Material	Not more than standard.
Alpha Naphthol	0.3% Max.
Screen Test (Powder Only)	1.0% Max. remaining on No. 40 screen 80% Min. passing through No. 200 screen.

SHIPPING CONTAINERS: Flakes—Paper Bags—80 lb. net.
Powder—55 gal. Leverpak—200 lb. net.

Write for Technical Data Sheet.

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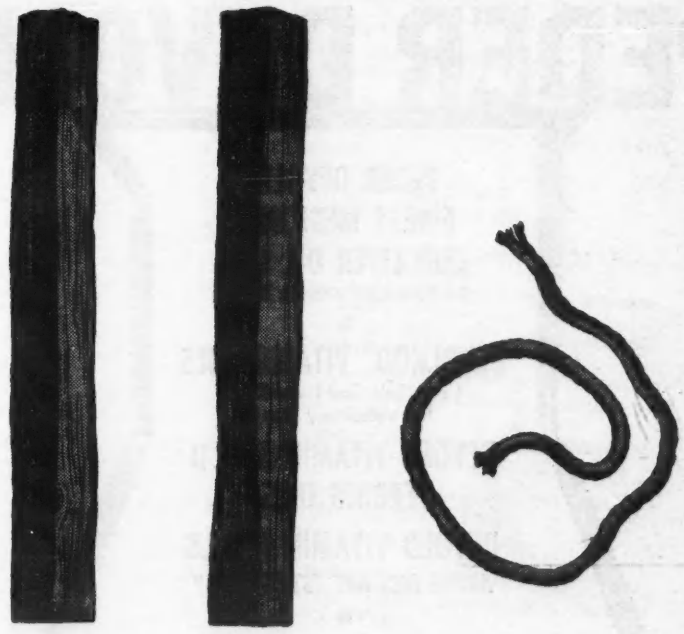

The only way you can get a 4-foot sag in an 8-foot rope is to fold it in half; which means there's no room between the two poles—they're side by side and touching.

PUZZLE

????????????????

The ends of an 8-foot rope are attached to two poles. The rope has a 4-foot sag in it. How far apart are the poles?

????????????????

There's no puzzle about product performance when you buy chemicals from United States Steel. Answer to puzzle above:

Benzene • Toluene
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Picoline • Pyridine
Pitch • Ammonium Sulfate
Ammonium Nitrate
Anhydrous Ammonia
Nitric Acid

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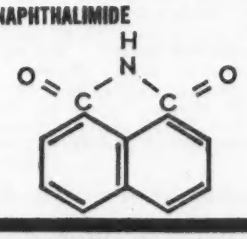
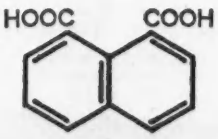
NAPHTHALIMIDE



(A tan-colored powder of 90% minimum purity; insoluble in water; very sparingly soluble in benzene, ether, carbon disulfide and alcohol; soluble in concentrated acetic, nitric and sulfuric acids and warm dilute aqueous potassium hydroxide.)

NAPHTHALIC ACID
(1, 8-Naphthalene Dicarboxylic Acid)



(A moist tan-colored product, soluble in warm alcohol and in alkaline solutions, slightly soluble in water and ether.)

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Drugs, Fine Chemicals

Phenobarbital was reduced 40 cents a pound in 100-pound lots on May 31 by a major manufacturer, but late last week two of its competitors were still carrying the old schedule ($3.25 a pound, freight allowed) officially. Spokesman for one of the concerns indicated, however, that it would meet competition where necessary and left the door open for a price cut, similar to that just posted, at some future date. Spokesman for the second firm had no comment to make.

Differences on pricing do not extend to the matter of imports. These, it's agreed, are steadily increasing, and consequently depressing the US market. To compete, a trade source said, domestic prices had to go lower.

Producers of drugs and fine chemicals who are affected by foreign competition are understandably reluctant to revise official schedules. A reduction is hard to rescind without antagonizing one's customers and at those times when imports are small and domestic inquiry good, a US manufacturer can get the higher price—if it's posted, that is.

Rise and fall in import volume, which often reflects the market situation at origin, is causing some chemicals to act like commodities, and price strength turns to weakness and vice-versa, in turn. At the same time, manufacturing and shipping costs remain unchanged or increase. Making the best of a difficult situation, some manufacturers merely dispense with an official listing and note "Prices on Request." Hardly a solution to the problem, but not a bad idea.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 17, 1960
59.27	59.27	59.29	60.25

For Current Prices See Page 10

July 1 Price Advances

Ammonium molybdate, crystals, 13c. to 15c. per lb.

Ammonium Molybdate—Effective July 1, contract prices for ammonium molybdate reagent crystals and ammonium molybdate CP crystals will be advanced, respectively, 15c. and 13c. a pound. Spot prices already reflect the increases.

New schedule for the reagent crystals ranges from $2.13 a pound for a 25-lb. fiberboard polyethylene-lined box to $2.05 a pound for a 400-lb. fiber, polyethylene-lined drum.

Prices for the CP crystals range from $1.40 a pound for a 100-lb. fiber drum to $1.35 a pound for lots of 15,000 pounds or more in 400-lb. drums.

Ascorbic Acid — Imports of ascorbic acid rose from 21,561 pounds in March to 26,336 pounds in April. Commerce department says this material was valued at $79,949 and dutied at $8,395.

The additional foreign supply, however, was not directly related to the 45c. a pound cut in "C" prices announced in mid-May. That action was occasioned, reportedly, by new domestic production and the desire to expand sales.

It is understood, though, that the repeated reductions in "C" prices have discouraged foreign manufacturers from stepping up exports to this market.

Shippers of ascorbic acid to the US in April were: Italy, 10,692 pounds, valued at $33,720 and dutied at $3,541; Japan, 10,142 pounds, valued at $31,970 and dutied at $3,357; and Denmark, 5,502 pounds, valued at $14,259 and dutied at $1,497.

Iodine—April imports of crude iodine amounted to 272,027 pounds and were valued, according to Commerce department reckoning, at $257,352.

Holding down first place on the suppliers' roster, Chile, the traditional supplier of a large percentage of US iodine requirements, accounted for 245,504 pounds, which were valued at $221,773.

Japan, which accounted for the remainder of April imports (26,523 pounds, valued at $35,579), had shipped in relatively large quantities of iodine earlier this year. This material was destined primarily for the US stockpile, reportedly, and did not disturb the open market.

Menthol — Brazilian and Formosan menthol is selling here at anywhere from $7.25 to $7.50 a pound, approximately 50c. to 75c. lower than postings two months ago.

The drop in prices reflects a seasonal decline in buying and fully adequate spot stocks. The trend could be reversed, however, if recent storms in Formosa curtail peppermint production.

The Formosan crop, originally expected to be as large as last year's could be reduced 20 percent or more, according to current speculation. Definite, however, is that the market at source has firmed up. Exporters there have boosted prices 10c. a pound within the last week, it's said.

Imports of natural menthol in April totaled 115,384 pounds, valued at $742,319 and dutied at $40,386. Shipping here were: Brazil 81,761 pounds, valued at $517,638 and dutied at $28,618; Taiwan 16,600 pounds, values at $111,766 and dutied at $5,810; France 6,614 pounds, valued at $42,238 and dutied at $2,315.

Also, Spain 4,409 pounds, valued at $30,643 and dutied at $1,543; Japan 3,000 pounds, valued at $28,868 and dutied at $1,050, and Australia 3,000 pounds, valued at $14,166 and dutied at $1,050.

Synthetic menthol imports in April amounted to 14,221 pounds and were valued at $91,641 and dutied at $4,978. Suppliers were: France 10,319 pounds; West Germany 1,500 pounds; Australia 1,500 pounds, and Spain 1,082 pounds.

Procaine Hydrochloride — Competition from imported product is causing domestic suppliers of procaine hydrochloride great concern. Some form of protection is needed, reportedly, but if previous government action in similar cases is any indication, none can logically be expected.

Tartaric Acid—April imports of tartaric acid were 382,083 pounds, valued at $120,389 and dutied at $22,924. Shipping here were: Spain 286,023 pounds valued at $92,490 and dutied at $17,161; Italy 66,297, valued at $18,806 and dutied at $3,977; and France 29,763 pounds, valued at $9,093 and dutied at $1,786.

Cream of tartar imports (potassium bitartrate) in April amounted to 188,209 pounds, valued at $49,420 and dutied at $5,878. Suppliers were: United Kingdom 100,000 pounds, valued at $28,571

—*Continued on page 54*

Drugs and Fine Chemical Imports: April

Imports of selected drugs and fine chemicals for March and April 1961, as reported by the Bureau of Census, were as follows:

		April	March
Ascorbic acid	lbs.	26,336	21,561
Caffeine	lbs.	82,000	178,649
Camphor, crude	lbs.	0	0
Refined	lbs.	46,900	31,900
Synthetic	lbs.	90,100	94,100
Iodine, crude	lbs.	272,027	177,663
Menthol:			
Natural	lbs.	115,384	105,282
Synthetic	lbs.	14,221	17,900
Pyridoxine	lbs.	440	0
Quinidine and salts	ozs.	92,099	107,640
Saccharin	lbs.	26,119	25,617
Sodium alginate	lbs.	22,110	28,800
Tartaric acid	lbs.	382,083	661,769
Thiamine	lbs.	3,590	1,145
Theobromine	lbs.	1,102	2,600
Vitamins and vitasterols, n.e.c.	lbs.	46,542	80,752

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Safe and Efficient Handling of Anhydrous Ammonia (wall chart)
Anhydrous Ammonia Handling and Storage (22)
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Mathieson Caustic Soda (AD-1142-261)
Safe and Efficient Handling of Caustic Soda (AD–228–457) (wall chart)

Mathieson Chlorine (AD–1097–459)
Chlorine, Unloading and Safe Handling (AD–1122–959) (wall chart)

Mathieson Anhydrous Hydrazine (AD–1061–558)
Mathieson Hydrazine Solution (MC–348–1260)

Mathieson Unsymmetrical Dimethyl Hydrazine (AD–1057–1157)
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Mathieson Thiosemicarbazide (MC–359–261)
Mathieson Hydrazodicarbonamide (MC–384–361)
Mathieson Hydrazine Dihydrochloride (MC–381–361)
Mathieson Monohydrazinium Phosphate (MC–385–361)
Mathieson Monomethyl Hydrazine (AD-1167-161)

Home Pool Care (AD–1080–660)
Keeping the Pool Safe and Sanitary (AD-1156-1260)

Mathieson Methanol (MC–393–661)

Safe and Efficient Handling of Nitric Acid (AD–1050–757) (wall chart)

Eliminate Acidity-Control Alkalinity-PH-Plus (AD-631-461)

Refining and Desulphurizing Cupola Iron with Purite (AD–321–960)

Scav-Ox (AD–1010–556)
Scav-Ox in High and Medium Pressure Boilers (MC–356–359)

Soda Ash, Handling and Storage
Unitized Loading of Soda Ash (MC–331)

Textone® for the Textile Industry, and Continuous Bleaching (AD–1005–R1058)
Textone Continuous Bleaching Process (MC–404–261)
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C2® for Slime Control in Paper Mills (MC–400–459)
Laboratory Preparation of Chlorine Dioxide Solutions (MC–339–661)
Penn-Olin Sodium Chlorate, Shipment, Handling, Storage (AD–1157–960)

Mathieson Sodium Methylate (MC–398–1158)
Methods of Analysis (MC–347–356)
Storage and Handling (MC–368–956)

Mathieson Sodium Nitrate (MC–333–758)
Sodium Nitrate, Treating Industrial and Domestic Wastes (MC–397–659)

Mathieson Sulfur (MC–323–359)

Mathieson Sulfuric Acid (AD–1094–1158)
Safe and Efficient Handling of Sulfuric Acid (AD–1033–457) (wall chart)

Mathieson Urea (AD–1169–161)
Mathieson Urea Data Sheet (MC–403–1160)

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New help for you

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ROCHE
Vitamin E data sheet

	ROCHE LIQUID TYPES		ROCHE DRY TYPES	
PRODUCT	*dl-alpha-* TOCOPHERYL Acetate, N.F.	*dl-alpha-* TOCOPHEROL, N.F. (unesterified)	Dry Vitamin E Acetate 33%	Dry Vitamin E Acetate 25%
DESCRIPTION	Clear, viscous oil. Pale yellow. Nearly odorless.	Clear, viscous oil. Yellow to light amber. Nearly odorless.	Snow white. Practically odorless and tasteless. Free-flowing.	Free-flowing, spherical beadlets. Mesh range insures maximum uniformity in products.
BIOLOGICAL POTENCY	1 milligram equals 1 International Unit (See Note A).	1 milligram equals 1.1 International Unit.	1 gram equals 333 I.U. of Vitamin E.	1 gram equals 250 I.U. of Vitamin E.
SOLUBILITY	Freely soluble in alcohol; miscible with ether, chloroform, acetone, vegetable oils. Insoluble in water.	Same as *dl-alpha* Tocopheryl Acetate at left.	—	—
STABILITY	Stable in air, light, ultra-violet light, strong acids and heat.	Stable to heat in presence of oxygen. Relatively stable to acids and visible light. (Activity may be destroyed by ferric or silver salts.)	Stable in tablets, capsules, dry mixes and during storage in usual shipping containers.	Exceptionally stable. No potency loss during handling and storage.
USES	Parenterals; multivitamin liquids; soft gelatin capsules, lotions, creams, ointments; confections.	Parenterals; lotions, creams, ointments; pet foods; flavor emulsions and citrus oils; in fats as an antioxidant.	Hard gelatin capsules; high-potency tablets (See Note B); multivitamin tablets; dietary products.	Hard gelatin capsules; dry granular products for reconstitution; instant food or beverage products, confections.
FORMS	—	—	Granular Fine Powder	Powder
PACKAGING	Seamless aluminum bottles.	Seamless aluminum bottles under inert gas.	Polyethylene bags in fibre drums. ½- and 1-kilo quantities in sealed metal containers.	Polyethylene bags in fibre drums. ½- and 1-kilo quantities in sealed metal containers.

NOTES

(A) This is the International Standard for Vitamin E, adopted by the *International Conference on Vitamin Standardisation* held in London in October, 1941. Roche supplied the synthetic *dl-alpha*-tocopheryl acetate from its laboratories. Since that time, what Roche supplied has been the standard by which all Vitamin E is judged.

(B) Used for direct compression of tablets with flat or slightly curved surfaces.

IMPORTANT—ABOUT COSTS. There are a number of different forms and potencies of Vitamin E commercially available. The potency of the product does not determine which form is most economical to use. The cost per *International Unit* should be calculated when selecting the most suitable type for your formulation.

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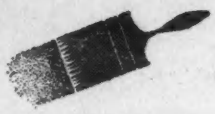
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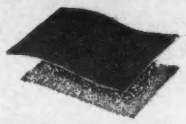
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Drugs, Fine Chemicals

—Continued from page 50

and dutied at $3,125; Spain 71,209 pounds, valued at $16,395 and dutied at $2,223; and Italy 17,000 pounds, valued at $4,454 and dutied at $530.

Thiamine—Imports of thiamine hydrochloride and mononitrate in April totaled 3,580 pounds, valued at $28,451 and dutied at $2,987. All of this material came from Japan.

Pyridoxine imports the same month were 440 pounds, valued at $14,511 and dutied at $1,524. Shippers were Denmark, 220 pounds, valued at $7,249 and dutied at $761; and Japan, 220 pounds, valued at $7,262 and dutied at $763.

Botanicals

Chamomile Flowers—Quote on Hungarian flowers has been reduced to a range of from 95c. to $1.10 a pound. The action coincides with the release of stocks held by Food & Drug Administration.

Roman flowers are listed, unchanged, at $1.75 to $2 a pound.

Copaiba Balsam—Price was hiked 5c., to 85c. to 95c. a pound, last week. Higher replacement costs were cited.

Locust Bean Gum—Imports of locust bean gum increased 28 percent in 1958-59, but decreased 27 percent in 1959-60. The low year for the past decade was 1957, when 7 million pounds were received; the high was reached in 1956 with inshipments of 15.1 million.

The 1960 total was 8,098,000 pounds; 1959, 11 million; and 1958, 8.6 million.

Papain—Six lots (140 cases, 1 drum, 129 crates) of papain wer detained at the Port of New York during the two-week period ended June 2, Food & Drug Administration reports.

Grace's Brazil Installation

—Continued from page 4

supported by technical knowledge available from other Grace chemical divisions in the United States.

In Bogota, Colombia, Grace recently announced that its operating subsidiary, Probst y Cia, Ltda., plans to build a sixty-ton-a-month phthalic anhydride plant, and in Fords, N.J., the Hatco Chemical Division of Grace is expected to go on stream shortly with additional capacity bringing the total output to 2,000 tons a month.

Concurrently, Grace de Colombia, another subsidiary, has joined with local investors in Colombia to finance a modern phthalic anhydride and phthalate plasticizer plant in Bogota. A $1 million unit will be installed next to the General Electric Company factory in the suburb of Bosa.

CSC Versus Diamond

—Continued from page 5

the company was mailing a letter to stockholders "confirming" Diamond Alkali's cash offer. Other details in the letter were undisclosed.

He said that the new Diamond Alkali offer was not expected to affect the merger agreement.

"I assume," he was quoted as saying, "the shareholders who accept the cash offer of Diamond Alkali would have voted for merger, and those who sell to Commercial Solvents are against the merger."

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(C.H.Z.) — $2ZrO_2.CO_2.xH_2O$

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PPG Caustic Plant Struck; 3 Other Units to Meet Needs

Pittsburgh Plate Glass Company's New Martinsville, W. Va., caustic-chlorine plant, struck last week by local 45 of the International Chemical Workers Union, remains in partial operation by supervisory personnel.

With limited production from this plant, plus full output from three other caustic-chlorine installations, the company expects to have sufficient material to meet all customers obligations while the strike is in progress, a spokesman for the chemical division says.

The New Martinsville plant, employing 537 workers, was struck last Wednesday, after failure of the company and the union to agree on terms for a new contract. The old contract expired June 13.

Pittsburgh Plate Glass offered hourly wage increases of 9, 10, and 11 cents graded according to earning groups. It also offered an across-the-board increase of 3 percent during the first year and a further 3 percent increase during the remainder of a proposed contract expiring February 28, 1964.

Chemical Sales Up

—Continued from page 7

totaled only $421 million in the first quarter, as against $441 million in the last three months of '60 and $507 million in the first quarter of last year.

Sales of basic chemicals amounted to $3.037 billion in the first quarter, compared with $3.05 billion in October-December of 1960 and $3.15 billion in the first three months of that year.

Basic chemical profits were as follows: $226 million (first quarter of 1961), $236 million (fourth quarter) and $280 million (first three months of last year).

Drug sales zoomed to $1.020 billion in the first three months of this year, as against $961 million in October-December, and $997 million in the first quarter of '60.

Drug profits after taxes were up in the first quarter over October-December—$96 million versus $88 million. Drug profits in the first quarter of last year, however, totaled $104 million.

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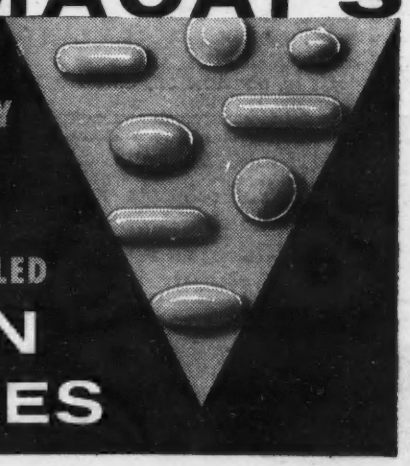

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Essential Oils. Aromatics

Three items advanced in price while nine dropped in price bringing the essential oils price index to its lowest in several years. Cedarwood advanced 10 cents per pound, Ceylon citronella advanced 5 cents per pound, and rosemary advanced 5 cents per pound. Cedarleaf dropped 50 cents per pound, Java-type citronella dropped 10 cents per pound, coriander dropped 25 cents per pound, grapefruit dropped 15 cents per pound, East Indian nutmeg dropped $1 per pound, ocotea cymbarum dropped 1 cent per pound, natural peppermint dropped 40 cents per pound, redistilled peppermint dropped 40 cents per pound and spearmint dropped 75 cents per pound.

According to the Foreign Commerce Weekly, the Daro Pharmaceutische Fabriek N.V., 88-94 Tolstraat, Amsterdam, will consider licensing proposals or offers from US firms for exclusive distributorships for high quality but reasonably priced cosmetics, and popular and ethical pharmaceutical products for the Benelux countries. This weekly is an official publication of the US Department of Commerce.

The frozen juice concentrate industry is switching from steel to aluminum for its cans, according to the Commerce Department Industrial Report.

This report showed that consumption of aluminum for can-making during the first quarter of 1961 totaled 8,987 tons which was an increase of 83 percent over the 4,920 tons reported for the first quarter of last year.

An aluminum company spokesman said that one ton of aluminum replaces three tons of steel. The saving in freight was instrumental in the switch since aluminum reduces freight costs an average of $1 per 1,000 filled six-ounce cans.

Price Trends

Advanced
Cedarwood, 10c. per lb.
Citronella, Ceylon, 5c. per lb.
Rosemary, 5c. per lb.

Reduced
Cedarleaf, 50c. per lb.
Citronella, Java-type, 10c. per lb.
Coriander, 25c. per lb.
Grapefruit, 15c. per lb.
Nutmeg, East Indian, $1 per lb.
Ocotea cymbarum, 1c. per lb.
Peppermint, natural, 40c. per lb.
redistilled, 40c. per lb.
Spearmint, 75c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 17, 1960
143.37	143.73	143.80	145.19

For Current Prices See Page 10

Essential Oils

Cedarleaf—From its previous price, $4 per pound, this oil has dropped to $3.50 per pound.

Cedarwood—The market continues to firm. From its previous price, $1.15 per pound, it has advanced to $1.25 per pound.

Citronella—Ceylon material is continuing strong. It has risen from $1 per pound to $1.05 per pound. Java type material, which is grown in Formosa, dropped from $1 per pound to 90c. per pound.

Coriander—From its previous price, $6.50 per pound, this oil has dropped to $6.25 per pound.

Coriander grows wild and is cultivated in many parts of the world including Argentina, Czechoslovakia, England, France, Germany, Guatemala, Holland, Hungary, India, Italy, Morocco, Norway, Poland, Roumania, Russia, Spain and Turkey.

Distillation is done in England, France, Holland, Hungary, Poland and Russia. Material grown in India and Morocco is distilled in the United States.

Grapefruit—From its previous price, $2.75 per pound, grapefruit has dropped to $2.60 per pound.

The grapefruit crop is estimated at 42.6 million boxes, which is two percent above last year and equal to the 10-year average.

With 88 percent of the crop harvested by June 1, there were still 5 million boxes to be picked, while a year ago at the same date only 2.8 million boxes remained unharvested.

This information is supplied by the Crop Reporting Board of the United States Department of Agriculture.

Lemon—Prices range between $2.45 and $3.75 per pound.

Production of lemons is estimated to be 14.1 million boxes by the Crop Reporting Board of the United States Department of Agriculture. This figure is more than three-fourths as large as the 1959-60 crop and near average.

Harvest is not as far along as it was a year ago and only half of the crop had been harvested by June 1 while a year earlier two-thirds of the crop had been picked.

Nutmeg—Reports have come in that East Indian nutmeg is now selling for $8 per pound. Some listings, however, remain at $12 per pound.

Nutmeg which is one of the oldest spices, is said to have been used as currency by the ancient Romans. This spice was introduced into Europe in the 12th century either by returning Crusaders or by Arabian physicians.

The Portuguese conquered the Moluccas in the 16th century and took possession of their nutmeg plantation. After this invasion, the Portuguese enjoyed a monopoly on nutmeg until the 17th century when Holland took over.

In order to keep the item profitable the Dutch restricted nutmeg plantings to Banda. This went on for some 200 years until the French planted the nutmeg tree on Ile de France.

In 1796 Christopher Smith took plants from the Moluccas to Penang where the first commercial crop was gathered early in the 19th century. A few years later nutmeg plantations were started in Malaya and the Indonesia Archipelago. And in the mid 19th century, the tree was planted in Grenada in the West Indies.

Ocotea Cymbarum—Material is now being offered for 44 cents per pound. The price has been 45 cents per pound.

Orange—The 1960-61 orange crop which is estimated at 118 million boxes, is 7 percent smaller than last year's crop and 3 percent below average. This information comes from the Crop Reporting Board of the Department of Agriculture.

Approximately 82 percent of the crop had been harvested by June 1, while last year 85 percent had been harvested by this time.

An estimated 21.3 million boxes of Valencias remained for harvest after June 1 this year compared with 18.9 million a year ago. Florida Valencias were late maturing this season; thus harvest will end later than usual. Slightly more than three-fourths of the Valencias had been picked by June 1.

In California less than one-fourth of the Valencias had been picked by June 1 which is about in line with the last two years. California Valencias will furnish most of the summer and early fall oranges.

Harvest of California's crop is expected to end earlier than usual because of early maturity.

Peppermint—Natural material has been reduced in price from $4.40 per pound to $4. Redistilled material has been reduced from $4.65 per pound to $4.25 per pound.

Rosemary — From its previous price, $1.10 per pound, Spanish NF material has advanced to $1.15 per pound.

Spearmint—The NF material has come down from $5.25 per pound to $4.50 per pound.

Imports Detained at N. Y.

Week Ended June 2, 1961

Black pepper, 21 lots, 2,390 bags.
Caraway seed, 2 lots, 200 bags.
Cassia, 12 lots, 987 bags.
Coriander, 3 lots, 841 bags.
Ginger, 9 lots, 761 bags.
Nutmegs, 2 lots, 14 bags.
Sesame seed, 2 lots, 500 bags.

Aromatic Chemicals

Vanillin—Imports in April totaled 28,650 pounds, which was valued at $83,138 and dutied at $16,654. The entire quantity came from Canada.

These statistics are supplied by the Foreign Trade & Economics Operations Division of the Bureau of the Census, US Department of Commerce.

Seeds and Spices

Alispice — Jamaica material has dropped in price from 72c. per pound to 69c. per pound. Mexican also has

—Continued on page 58

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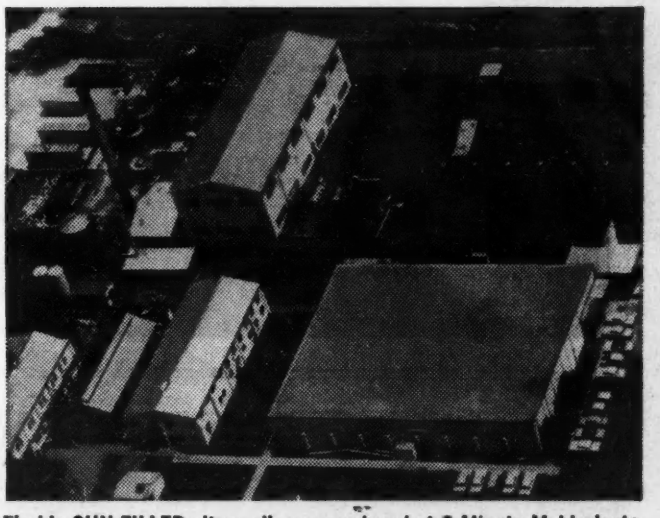
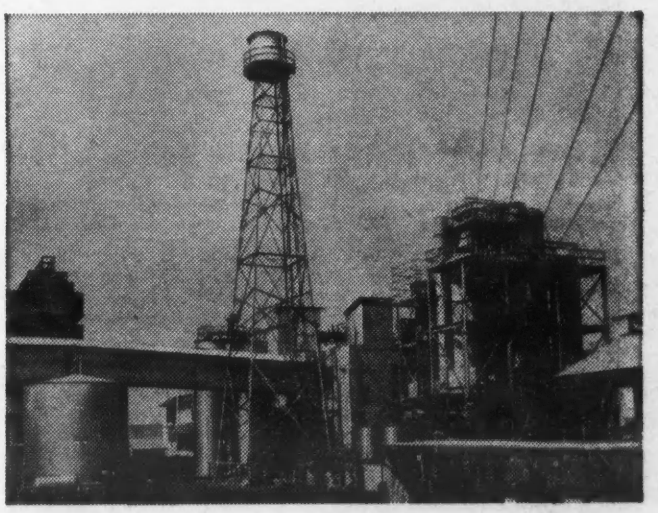


Florida SUN-FILLED citrus oils are produced at 3 Minute Maid plants — Plymouth (shown above), Auburndale and Leesburg, Florida.



California SUN-FILLED citrus oils are produced at Minute Maid's Golden Citrus plant at Anaheim, California.

With extensive groves in Florida and California, Minute Maid is the *only* producer which gives you a choice of citrus essential oils from both of these great citrus-producing states. For example, Minute Maid offers *two* SUN-FILLED All-Valencia Orange Oils, Florida or California... both Cold Pressed, U.S.P., with true, rich Valencia Orange flavor, aroma and color.

All SUN-FILLED citrus essential oils are guaranteed 100% pure. You can use them with complete assurance because they're produced and packed under continuous U.S.D.A. inspection... completely protected against adulteration and sophistication by tamper-proof seals.

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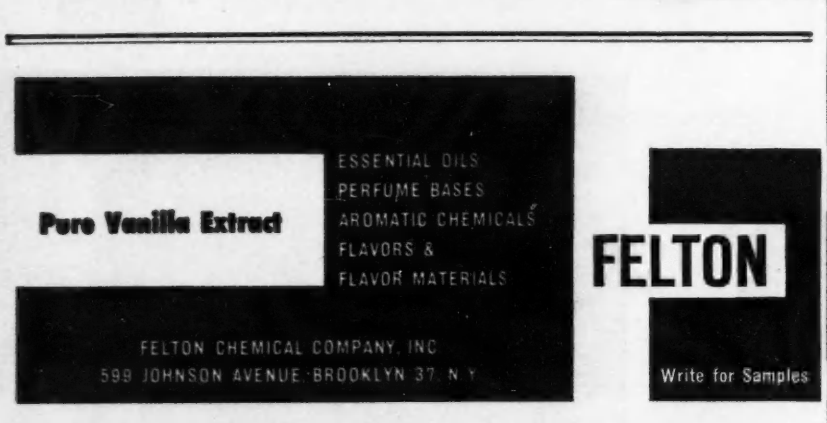

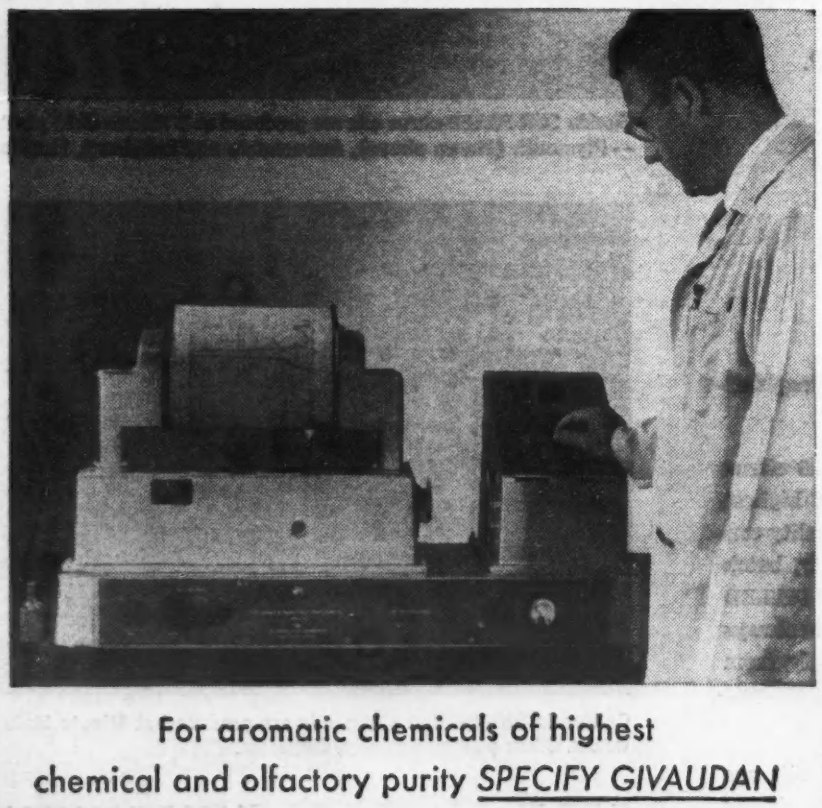

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Essential Oils

—*Continued from page 56*

dropped. It came down from 62c. per pound to 60c. per pound. Honduras material remained at its previously-listed 64c. per pound.

Canaryseed—Moroccan ⅔ percent material advanced from $10.35 per pound to $10.50 per pound.

Fenugreek — Moroccan material advanced from 9c. per pound to 10c. per pound.

Oregano—Greek material has dropped in price from 30c. per pound to 25c. per pound. Mexican and Portuguese material remain at their previous prices—22c. per pound and 15c. per pound respectively.

Pepper—Both Malabar and Lampong black rose a bit. They both advanced from 47c. per pound to 47½c. per pound. Muntok white dropped from 57c. per pound to 56½c. per pound. Brazilian white continues at 56c. per pound.

Polyethylene Gets FDA Nod

—*Continued from page 4*

& Drug Research Laboratories, Inc., Maspeth, N.Y., and Phillips Petroleum Company, Bartlesville, Okla., and other pertinent data. Objectors to the new regulation have until July 10 to file their comments with the agency.

In giving its sanction to polyethylene for use in food packaging, FDA set out these conditions:

(a) Polyethylene consists of a basic resin produced by the catalytic polymerization of ethylene to which may have been added certain optional substances of a grade of purity suitable for use in contact with food to impart desired technological properties. Subject to any limitation prescribed in this section, the optional substances may include:

(1) Substances generally recognized as safe in food and food packaging.

(2) Substances the use of which is permitted under regulations in this part, prior sanctions, or approvals.

(b) Polyethylene shall conform to the specifications prescribed in paragraph (c) of this section, and shall meet the extractability limits prescribed in paragraph (d) of this section when tested by the methods provided in paragraph (e) of this section.

(c) Specifications: (1) *Infared identification.* Polyethylene can be identified by its characteristic infared spectrum.

(2) *Specific gravity.* Polyethylene has a specific gravity of not less than 0.85 nor more than 1.00, as determined by ASTM Method D-1505.

(d) Extractability limitations: (1) Polyethylene may be used in contact with food, except for articles used for packing or holding food during cooking, provided it meets the following extractability limits:

(i) Maximum soluble fraction of 11.3 percent in xylene after refluxing and subsequent cooling to 25° C.

(ii) Maximum extractable fraction of 3.1 percent when extracted with ethyl acetate at 50° C.

(iii) Maximum extractable fraction of 5.5 percent when extracted with *n*-hexane at 50° C.

(2) Polyethylene having chemical and physical properties to attain the desired technical effect may be used as a component of adhesives.

Cellophane Is Cleared

In a related move, FDA last fortnight cleared cellophane, along with chemical substances used as optional constituents in its manufacture, as "safe" for use in the packaging of foodstuffs.

An "optional" substance must be of a grade of purity suitable for use in food packaging as constituents of the base sheet, or as coatings applied to impart desired technological properties, the agency explained.

Petitions for clearance of cellophane had been filed with the agency by E. I. duPont de Nemours & Co., Wilmington, Del.; American Viscose Corporation, Philadelphia; Olin Mathieson Chemical Corporation, New York, and La Cellophane, Paris, France.

Sohio Chemical Offering New High Quality Urea

A new urea, said to meet strict quality requirements for any commercial application, has been introduced by Sohio Chemical Company, Lima, Ohio. The new chemical grade urea is being distributed under the trade name "Solar Urea."

The product, Sohio says, has been made possible by a new manufacturing technic —the "Vulcan-Inventa Urea" process— and a "Stora-Vulcan" evaporator installed at the Solar Nitrogen Chemicals, Inc., plant at Lima. Sohio Chemical Company operates the Lima plant, and also acts as sales agent for Solar.

"Solar Urea" reportedly has "the easy-to-handle advantages of the free-flowing prilled form." At the same time, Sohio says, tests show that this new urea meets "such rigid specifications that it can be used in sensitive applications where crystal urea previously had been required."

Plasticizers Roll Up

—*Continued from page 7*

oleic, phosphoric, sebacic, and stearic acids, and complex polymeric-type plasticizers.

Statistics in this preliminary report on production and sales of plasticizers are virtually complete. Complete statistics will be given in the commission's final report on the production and sales of synthetic organic chemicals in 1960, which will be issued later this year.

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Trade Name Chemicals

Polyurethane Elastomers Market: Smart Money Taking a Closer Look

Chemical producers are taking a closer look at the budding polyurethane elastomers market where sales in excess of 10 million pounds are expected this year. Last year's 6.7 million pound total was more than three times the amount used in 1959 and some sources hope for a 40 million pound market within five years. Despite the fact that far and away the biggest growth in urethane materials has been in foams, other specialty applications have begun to take hold during the past two years. For example, urethane coatings chalked up sales estimated at 1.5 million gallons last year and could grow to 12 million by 1965. Adhesives use in caulking and sealing compounds is also reported on the increase.

URETHANE RUBBER: SALES FORECAST

1965	*40.0 million lbs.
1961	*10.0 million lbs.
1960	6.7 million lbs.
1959	2.2 million lbs.
1958	*250,000 lbs.

*Estimate

Source: Tariff Commission

A handful of end products are possible from isocyanates and polyester resins. These include rigid and flexible foams, lacquer formulations, wire enamel, adhesives and urethane elastomers. Sales of foams amounted to 110 million pounds last year, 85 percent of which was in flexible polyurethane foam.

Uses for Specialty Urethane Elastomers

The market for specialty urethane rubber products is in hard rubber tires for fork-lift and inter-plant vehicles; in industrial rollers for the paper, paint and textile industries; and for oil seals and moving parts in engines.

Although some observers consider it a slightly dubious distinction, urethane rubber makes possible the now familiar spiked heel on women's shoes.

As to the possibility of using polyurethanes in standard truck and automobile tires, most chemical sources think it unlikely. A high coefficient of friction precludes the use of these materials as they are in tires, although as in other cases a blend may be the answer.

Among companies offering urethane elastomer compositions are Naugatuck Chemical division of United States Rubber ("Vibrathane"), B. F. Goodrich Chemical ("Estane") and General Tire and Rubber Company ("Genthane"). Thiokol Chemical Corporation manufactures a series of liquid urethane resins for casting or coatings under the "Solithane" tradename.

Last week American Cyanamid Company announced its entry in the field with a prepolymer product tradenamed "Cyanaprene."

The company's product development and applications research groups have put the finishing touches on a new production process and test samples of the new product are available.

In the gross sense, "Cyanaprene" is reported similar to other available urethane prepolymers for elastomers, but the company reports structural differences in the product require refinements in processing techniques.

Broad Spectrum Use Predicted

According to Dr. J. G. Affleck, manager of the rubber chemicals department, "Cyanamid's initial product will offer several important advantages over commercially available polymeric materials.

"With our product," he reports, "a processor can manufacture an elastomer as soft as a crepe rubber sole or as hard as linoleum by merely selecting the proper curative. Other products require both a specific prepolymer and a specific curative."

If current plans develop as expected, Cyanamid will also offer five curative agents for use with their polymeric product.

Cyanamid, long a supplier of auxiliary chemicals to the rubber industry (antioxidents, peptizers, accelerators), feels a sizable part of future growth in elastomers will be in specialty polymers such as the polyurethanes.

With this in mind, the company plans to offer future elastomeric materials from a long range research program directed toward fundamental improvements in the properties of urethane prepolymers.

Basically, a urethane elastomer prepolymer is formed by the combination of polyester resin and diisocyanate. In the liquid casting method, the prepolymer is then heated in a mold with a curative (diamine or polyl) to produce the solid, rubber-like polyurethane elastomer. These elastomers may have a rating on the Shore A-2 hardness scale ranging from 45 to 90, depending on curative, processing conditions and composition of the prepolymer.

In foam production the trend in recent years has been to the use of polyether systems due to lower cost and better resillience in the finished product than foams from polyesters.

But in the production of hard polyurethane elastomers, where high modulus value with low elongation is usually required, polyesters are favored. The use of fillers such as carbon black increase modulus value while decreasing elongation somewhat.

Recently, a dry resin prepolymer, partially cured, has been made available which is designed to be used on plastics molding and extruding equipment and will cut processing time compared to the older liquid casting system.

Observers say this type of product could provide great impetus to the growth of urethane elastomer markets by permitting mass production of elastomer parts with properties comparable to those of liquid cast polyurethanes.

Extrusion Use Seen

It should be of particular interest to plastics processors who already have molding and extruding equipment. Rubber producers, on the other hand, have favored use of castable or "millable gums" adaptable to rubber production equipment.

Generally, basic producers of isocyanates and polyesters and polyethers have not marketed finished products. Such firms include Allied Chemical Corporation, whose Solvay Process division will shortly bring a new plant on stream at Baton Rouge, La. to manufacture "Actol" polyethers. The National Aniline division supplies polyesters and diisocyanates, while "Genetrons" are supplied as blowing agents from General Chemical division. In April, Barrett division brought out a new line of rigid urethane foam sheets, for use in insulation.

Allied reported last week that it will stick to production of basic components and will not manufacture compositions.

E. I. duPont de Nemours & Co. is the industry's largest producer of toluene diisocyanate and also markets a liquid urethane elastomer, "Adiprene L," along with an amine curing agent trade named "MOCA," (methylene-bis-o-chloroaniline). Trade sources estimate the company supplied about half the 5 million pounds of prepolymer sold last year.

Mobay Chemical Company, which pioneered the commercial technology for producing urethane elastomer items by casting, molding and extrusion methods, is also a basic producer of TDI and polyester resins.

In March Mobay announced development of a granular form of resin trade

—Continued on page 70

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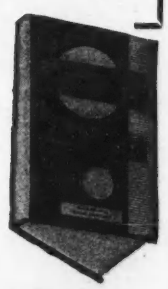

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Petroleum Derivatives

Sharp demand is noted for benzene. Held responsible is increased styrene monomer requirements. Fortunately adequate benzene supply is available to meet needs. Contract price is expected to continue unchanged at 34 cents a gallon past the half-year mark. Toluene business is routine. Xylene is notable for sustained interest in ortho. Shortage of naphthalene stimulates ortho demand both in domestic and overseas markets for use in phthalic anhydride production. Export wax situation is slow with some discounts at 4 to 5 percent reported. Inventories are high on the west coast, says one trade source.

Toluene and xylene of petroleum origin will soon be subject to an import tax. Bureau of Customs has been directed to begin collection of taxes 90 days after the ruling is published in *Treasury Decisions*.

Tax will be ¼ cent per gallon due to trade agreement concessions in contrast to the general ½ cent per gallon import tax on petroleum products.

Texas crude oil buyers seek to cut July purchases. That's the story out of Austin where buyers last week told the Texas Railroad Commission that they plan to purchase less crude oil next month.

Citing high crude stocks, the buyers said they intend to purchase 2,417,424 b.p.d. in July, a reduction of 62,121 b.p.d. from June's acquisitions. An eight day production schedule would meet July needs.

Market demand for crude oil in June to rise. That's the prediction of Bureau of Mines in its monthly market forecast.

Amount of domestic crude oil to be consumed or exported is estimated at 7,030,000 b.p.d. according to the Bureau as against 6,920,000 b.p.d. forecast for May.

Prices declined in March for crude petroleum and petroleum products. According to Bureau of Labor statistics, the wholesale price index (1947-49 equals 100) for March was 122.8, compared with 123.1 for February and 115.0 for March 1960.

Aromatic Solvents

Benzene—Demand continues strong.

Styrene monomer end use boom is stiffening an already formidable demand picture.

Benzene supply situation is unchanged. Most reports indicate an adequately supplied market.

While most customers are obtaining needs without difficulty, very few are able to build inventories according to trade sources.

Only area that belies this in in maleic anhydride production, a field currently saddled with over capacity.

Toluene—Supply is fairly well balanced with demand, sources report.

The city of Chattanooga recently celebrated the opening of its new river terminal with the unloading of a 610,000 gallon barge shipment of toluene from Texas.

Inauguration of the dock facilities is the first step in a major program to make Chattanooga a primary distribution terminal for river freight.

Trade reports indicate an imminent large shipment, or shipments, of toluene to Germany. Reported end use will be as solvent rather than for chemical raw material.

Toluene imports in April totaled 58,792 gallons valued at $10,446. March imports were approximately 20 percent higher.

Xylene—Demand for the isomers, particularly ortho, remains the keynote in this area of the market.

Solvent demand is not showing too much life.

Urgent demand for ortho for phthalic anhydride production has producers turning out increased volume of xylene.

Production in the first quarter was 16.5 million gallons ahead of the same period last year.

Industrial areas are reported to be highly competitive for available business with prices varying from location to location.

Xylene imports in April totaled 51,064 gallons valued at $11,583.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 17, 1960
104.11	104.11	104.11	103.82

For Current Prices See Page 10

LPG's

Ethane-Ethylene—Production declined moderately to 26.6 million gallons in the first fortnight of May as against 26.8 million gallons during April 16-30. Stocks remained at 913,000 gallons.

Propane—Output of propane declined to 183.9 million gallons during May 1-15 from the 214.3 million gallons turned out during April 16-30.

Stocks climbed 48 million gallons to a total of 604 million on May 15.

Waxes

Wax exports continue on the slow side.

Usually quiet at this time of the year, wax export volume is even below the seasonal limits say trade sources.

Long supplies are reported at some refineries as a result.

Particularly noticeable is the long supply situation on the west coast. Sporadic long supply is also noted on the Gulf.

In contrast, East coast refiners are reported to be maintaining normal working inventories.

Price has suffered from the excess of wax. Cuts to the extent of 4 to 5 percent are reported on some export shipments, a situation the refiners term as temporary until heavy inventories can be worked off.

Two factors appear to be hurting US exporters. One is reduced world demand and the second is foreign competition.

In Latin America many countries have dollar shortages and are simply unable to make purchases. Secondly, foreign competition in the form of E. German, Japanese and other interests are cutting into US sales.

Miscellaneous

Mineral Oils—General sales picture is unchanged with accustomed volume moving into widely-diversified end use areas.

Seasonal applications are making news, however.

Of particular interest in the South is the present use of mineral oils in fighting the tobacco sucker.

Attacking the top of the tobacco plants about this time of year, the sucker kills off the top leaves and causes untold crop damage.

Mineral oils are being used in control sprays to eliminate the pest.

Though normally only a small portion of mineral oils consumption, the tobacco sucker control oil application does point up the variety of uses to which the petroleum oils may be put.

Prices of all mineral oils are unchanged and firm.

Last price change, in April, did cause a flurry of orders as consumers hastened to order their full monthly quotas in order to beat the higher price.

It's still early to determine if the heavy April and early May orders resulted in any cutbacks in late May and June, say producers.

Crude Oil Stocks Climb

Domestic and foreign crude petroleum stocks at the close of the week ended June 3 were 92,000 bbls. higher than at the end of the preceding week.

Week ended June 3—257,355,000 bbls.

Preceding week—257,263,000 bbls.

This increase comprises a decrease of 41,000 bbls. in stocks of domestic crude, and an increase of 133,000 bbls of foreign crude.

(Source: Bureau of Mines)

Coating Materials

Coatings raw materials, particularly those used in paint formulations, are lagging behind the record setting pace of last year, sources report. While the trade would like to see a repetition of the 1960 sales, they still find enough business to keep them well in the black. Wet weather over much of the country this spring has been the biggest factor in holding back sales. Currently demand is uneven.

Sales tend to be very high for a few weeks and then drop off sharply. Sources are hopeful that a few months of sustained demand will offset some of slow periods earlier in the year and put sales solidly in the black.

Ultramarine blues are up 10 percent this week, according to the schedule posted by one producer. Prices have been increased an average of three to four cents a pound, and according to the producer, this marks the first increase in listings since 1953.

Plasticizer production in 1960 was the highest on record, according to a preliminary report made by the Tariff Commission. Sales of plasticizers were also up, hitting 500 million pounds, an increase of 24 million pounds over 1959. The 24 million pound increase in sales represented an additional $7 million in revenue.

Demand for the phthalate esters currently is at routine levels, sources report. Industrial uses are spotty in activity, particularly vinyl flooring makers. Prices are reported to be firmly established with the supply situation improved.

Supplies of casein are becoming alarmingly low, reports one informed source. Argentine casein supplies are reported to be exceptionally low for this time of the year. One large casein exporting house in the Argentine is said to have withdrawn offers for the time being. French casein is reported off the market and offers of Polish limited.

Prime Pigments

Antimony Oxide—The 3½c. difference in listings that has existed in the market over the past month continues to be the bone of contention between various producers. Ever since a price advance went into effect, two producers have stoutly resisted the move and still offer car lot quantities of the oxide at 26½c. The majority in the trade reports that are doing business at the 30c. a pound level with no loss of sales.

Nearly everyone agrees that the demand for antimony ore on a world-wide basis has placed a premium on quality ore. Japan, particularly is said to be buying up large quantities of ore for its own needs.

Shipments of ores to this country is reported to be arriving on schedule, with none of the interruptions in shipping that occurred some months back. Demand for the oxide is currently at routine levels, sources say. Fire-retardant paints and plastics are taking the oxide in normal quantities, they conclude.

Titanium Dioxide—Demand is reported to be off somewhat but remains on a satisfactory level. Biggest check on demand to date has been the poor painting weather this Spring. Since about 60 percent of the titanium dioxide production ends up in paint formulations, the effect of weather, while indirect is nevertheless an important factor in the market. Trade sources comment that with a record sales level last year to aim for, anything that comes close will be considered very profitable. As for the present, the pattern nationally, is one of spurts. The trade finds that whenever weather permits, sales shoot up. With a few good months ahead, the trade anticipates another good year.

Ultramarine Blue—Listings were boosted 10 percent last week by one producer. This is reported to be the first increase on ultramarine blue since 1953. According to the latest schedule the new prices are: cobalt-type ultramarine blue, 250-lb. bbls., delivered East of the Rockies, 33½c. to 38c. a pound. For the jobbing types, the new price is 18c. to 19c. a pound, and the regular types are newly quoted in the range of 25c. to 40½c. a pound.

In making the announcement on the price increase, the producer cites the increases in the costs of production, labor and freight that have accumulated in the past eight years as the reason for the new prices. Demand for the ultramarine blues is currently at normal levels, with the traditional paint formulations taking their share of production.

Price Trends

Advanced
Ultramarine blue, 3c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 17, 1960
104.72	104.71	104.55	103.14

For Current Prices See Page 10

Lacquer Materials

Cellulose Butyrate/Acetate—Market continues along at a routine pace with supplies and demand in good balance. No price changes are reported.

Nitrocellulose—After a one to two cents a pound increase on various grades of nitrocellulse, producers report that the new listings are firm in all respects. Demand from furniture coating operations is about normal, sources report. The outlook for the next few months remains favorable; supplies adeguate for all needs.

Plasticizers—Production of plasticizers hit an all-time high in 1960, the Tariff Commission reports. Although past of the increase in production was felt to be the result of more complete coverage on the part of the commission, output at 602 million pounds outpaced the level reported for 1959.

Sales of plasticizers in 1960, covered in the report, amounted to 500 million pounds, and was valued at $149 million, compared with 476 million pounds and $142 million in 1959.

Production of cyclic plasticizers in 1960, which consisted chiefly of phthalic anhydride and phosphoric acid esters and complex polymeric-type materials, amounted to 445 million pounds, compared 403 million pounds in 1959.

Sales of cyclic plasticizers in 1960 amounted to 384 million pounds, valued $103 million, compared with 362 million pounds, valued at $98 million in 1959.

Production of acyclic plasticizers in 1960 amounted to 157 million pounds, compared with 136 million pounds reported for 1959. Sales of acyclic plasticizers in 1960 amounted to 116 million pounds, valued at $45 million, compared with 115 million pounds, valued at $44 million in 1959. The principal products included in the acyclic class are esters of adipic, azelaic, oleic, phosphoric, sebacic and steraic acids, and complex polymeric-type plasticizers.

Current demand for the esters is said to be about average some users are reported to be in a better market position than others, sources find. Slush molding operations are improving, wire coatings about average while vinyl tile makers seem to have hit a few snags. Supplies of the esters are reported to be in good balance. Listings are firm.

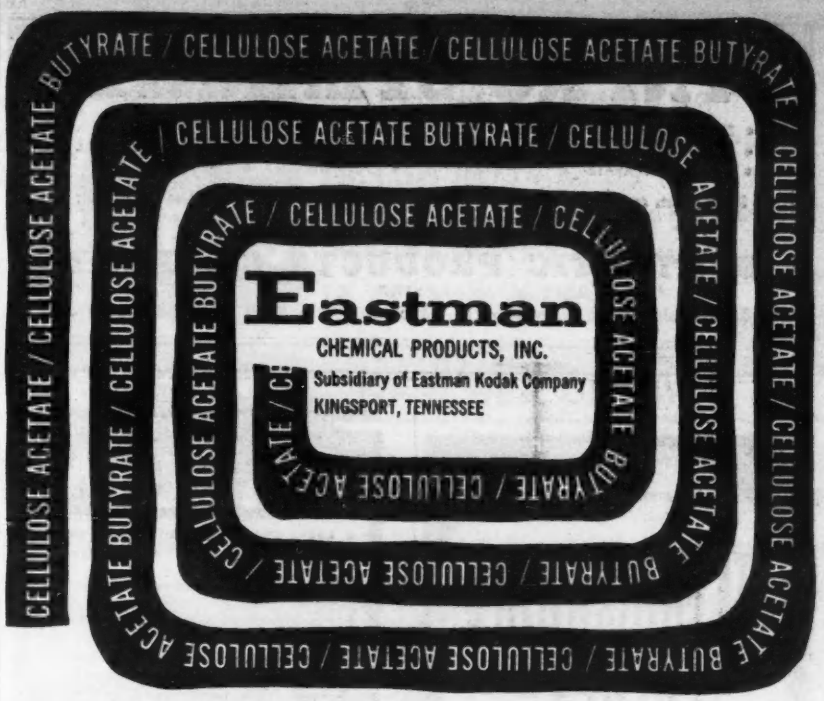
Miscellaneous

Casein—Market for casein is reported to be very firm and very tight. Sources report that offers of Argentine, Polish and Australian casein are very limited. Argentine ranged between 18¾c. to 19¼c. a pound. On the basis of July shipment, limited quantities of Polish are being offered at 19c. a pound.

Australian casein at 21¼c. to 21½c. a pound is quoted on the basis of November arrival. World-wide supplies of casein are reported to be very tight. One informed source reports that casein supplies in the Argentine are at exceptionally low levels. Others report that 75 percent of Australian casein production has been sold out.

A similar report has been heard concerning New Zealand casein. Many in the trade believe that the casein market may be in for some very tight months ahead, a dramatic reversal of the situation just a few months ago.

Pine Gum — The average commercial crude gum price for the week ending June 3 was $34.50 per standard barrel. For the previous week, the price was $34.70 while



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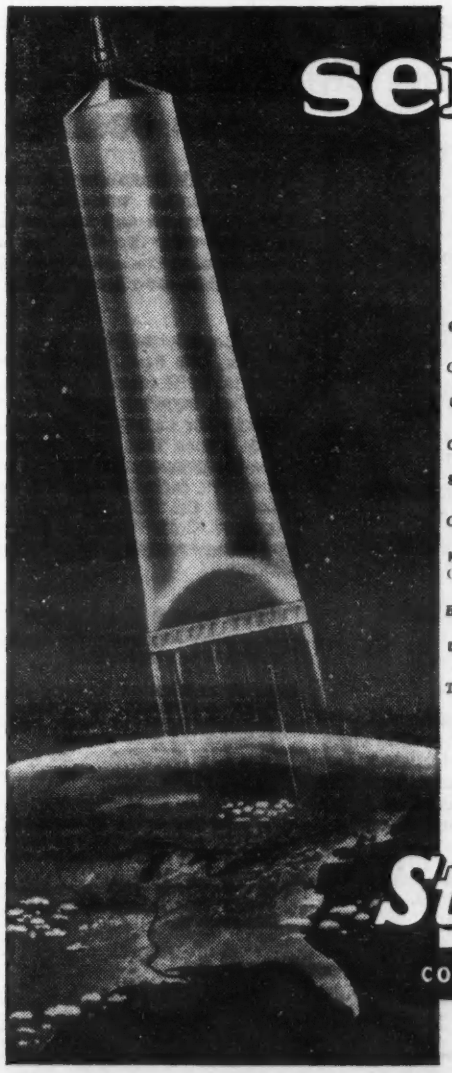
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Coating Materials

for the same week last year the price per standard barrel was reported at $37.

The volume of gum deliveries for the week ending June 9 totaled 18,000, including 6,501 loan. Previous week saw 19,600 deliveries with 72 loan. For the same week last year, deliveries totaled 18,300.

The average barrel content of turpentine was reported at 10.59 gallons, with rosin at 299.3 pounds. Gum grading included 40 WW, 26 WG, 10 N and 24 M.

Coating Materials Briefs

PE's PIPING PROSPECTS: The recent approval of the Federal Housing Authority for the use of polyethylene pipe and fittings is expected to speed acceptance of pipe made from polyethylene, reports Phillips Chemical Company, Bartlesville, Okla.

An estimated 66 million pounds of this plastic pipe was used in 1960. Phillips predicts that the biggest increase will come in the use of high-density polyethylene, which last year accounted for 20 percent of polyethylene pipe sales.

PHENOLIC PROCESS: Limited commerical production of phenolic and other thermosetting plastics extrusions has been announced by York Industrial Plastics, Inc., York, Penn. The unusual process, now being developed in the US, has been utilized in Europe for some years, York reports.

The phenolic extrusions are expected to find their major applications in market areas similar to those served by paper-based, phenolic laminates. According to the company, the cost of phenolic extrusions varies from 50 to 75 percent of that of equivalent items fabricated by laminates.

PLASTIC'S NEW CASE: Union Carbide Plastics Company, N.Y., is marketing plastic cases for bottled beverages. Injection molded of Union Carbide's "DMD-7014" high-density polyethylene, the cases are said to offer a combination of properties not previously available in bottle cases.

The plastic cases weigh less than half the weight of wooden cases. This weight reduction is expected to effect appreciable economies in transportation costs for bottlers, the company reports.

Carbon Black Secret Out

—Continued from page 3

under the direction of George Webster, president and general manager. Named plant manager is Dewey D. Billodeau, formerly assistant quality control superintendent at Houston, Tex.

Though unconformed until now, the 50-million-pound-a-year unit at Port Jerome will be first of three current United Carbon projects to come on stream. Others are:

- A 64-million-pound plant at Los Angeles, the West Coast's first, slated to come on stream in late 1961 (OPD, 2/13/61).
- A 20-million-pound unit in the Valencia industrial area of Venezuela, slated for completion by late '61 at a cost of $3 million with local capital participating (OPD, 1/30/61).

The Port Jerome location is said to provide easy access to carbon black raw materials. Also, it permits one-day delivery service to customers in the northern and central sections of France, the company points out.

Initially, the facility will employ sixty-five workers. Production will begin with HAF black, and FEF and ISAF are slated to follow.

FDA Frets Over Samples

—Continued from page 4

tion: Federal law prohibits dispensing without prescription."

Neither do they give the common or usual name of the drugs and their active ingredients, the identifying lot or control number, nor the name and address of the manufacturer, packer or distributor.

Commenting on the actions, Commissioner of Food & Drugs George P. Larrick points out that physicians' samples are not illegal when properly labeled and used as such.

"However," he goes on to say, "some of the products involved [in the seizures] are new drugs, permitted to be marketed only when prepared and packaged under special controls to assure safety and maintenance of identity, strength and proper labeling.

"Some are antibiotics requiring certification of every batch for safety and efficacy in FDA laboratories before release.

"The conditions found in repackaging of these physicians' samples short-circuit or nullify the essential safety controls required before marketing."

Mr. Larrick reports that the required protective labeling is frequently removed, causing a risk of mix-ups in the drugs. Removal of the cautionary statement, he adds, may cause a dangerous drug to be used without medical supervision.

FDA says that it has no accurate statistics as to the number of samples which are given annually to physicians by the drug industry.

And, it adds significantly, it has no evidence that physicians generally dispose of their samples improperly.

Drugs Not 'Discoveries'

—Continued from page 5

Appeals in Chicago held that the discoveries might well qualify for special treatment and ordered a full trial of the claim.

The Court of Appeals in Boston, however, ruled in a similar case involving Polaroid that when the tax relief law mentions discoveries it means such things as oils and minerals and not inventions.

The Supreme Court, in an opinion by Chief Justice Warren, sided with the Boston court.

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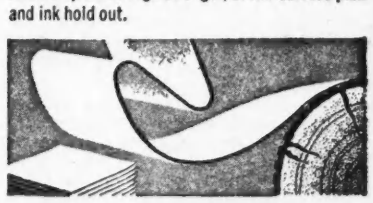

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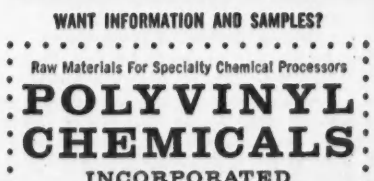

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Oils, Fats and Waxes

Further advances in the price of tung oil featured the oils and fats market last week. Market advanced another 1 cent per pound, the second during the past fortnight because of the 3 cent boost in the 1961 support price. This also was responsible for the raising of bids about 7/8 cent per pound for government oil sold last week. Holders of tung oil were not pressing for business because of the uncertainty of obtaining replacements from the Argentine, which have been moving to Europe at higher prices.

Price trend of tallow and greases continued downward, the market declining 5/8 cent per pound because of the lack of demand for domestic and export. Offerings continued liberal. Lower cost of tallow was reflected in animal fatty acids. Oleic and stearic acids and tallow fatty acids were reduced 3/4 cent per pound. Vegetable fatty acids were unchanged.

Edible vegetable oils were weaker due to the drastic declines in soybean and cottonseed futures, because a prolonged maritime strike would seriously affect exports. Soybean, cottonseed, corn and peanut oils were easier and declined sharply.

Linseed oil continued in good request against current contracts, while new business dried up following the booking of sizable quantities for forward delivery which took place before the recent advance. Oiticica oil was in light demand and steady. Crude menhaden and refined fish oils were unchanged.

Soybean meal was lower, but rallied and closed unchanged. Linseed and peanut meals were sligthly lower, declining 50 cents per ton.

Price Trends

Advanced

Cottonseed meal, $1 per ton.
Tung oil, 1c. per lb.

Reduced

Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Cottonseed oil, crude, ⅜c. per lb.
Refd., ⅜c. per lb.
Greases, ⅛c. to 5¾c.
Lard, cash, 7/10c. per lb.
Linseed meal, extracted, 50c. per lb.
expeller, $1 to $2 per ton.
Oleic acid, ¾c. per lb.
Peanut meal, 50c. per ton.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.
Stearic acid, ¾c. per lb.
Tallow, edible, ½c. per lb.
inedible, ⅛c. to ¾c. per lb.
Tallow fatty acid, ¾c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	June 17, 1960
109.37	109.56	114.13	112.25

For Current Prices See Page 10

Vegetable Oils

Castor—Trading was moderate chiefly for prompt needs. Prices were steady and unchanged. No. 1 Brazilian was maintained at 17¾c. per pound, tank cars, New York, prompt delivery. Domestic grades were held at former levels.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	2,380,000
Previous week	.....	600,000
Corresponding week, 1960	51,300	1,644,000
Total this year	.....	38,410,000
Corresponding week, 1960	2,480,700	42,374,000

Coconut—Buying interest was slow. Crude was offered at 11⅜c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment, with sales at 11⅛c., July shipment. The New York market was quiet, ranging from 12½c. to 12¾c., tankcars, f.o.b. New York, prompt delivery.

Corn—Crude was easy and fractionally lower. Sales were noted at 16½c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil declined to 20.23c., tankcars, New York basis.

Cottonseed—Futures dropped drastically because a prolonged maritime strike would disrupt export business. Soybean futures were also demoralized. Heavy liquidation caught stop orders and resulted in sharp declines chiefly in old crop deliveries, while deferred were moderately lower. Cash oil also was lower and refined salad dropped to 16⅝c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil also declined and closed merely nominal. Tankcars were nominal at 13c. per pound, in the Valley and 12⅝c., Texas.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, June 16, follow:

	Sales	Cents per Pound High	Low	Close
July	1,732	15.00	13.95	14.26S
Sept.	484	14.50	13.66	13.97S
Oct.	169	14.00	13.36	13.74S
Dec.	159	13.86	13.30	13.52@13.60
March	8	13.75	13.50	13.70S
May	14	13.88	13.50	13.65 Bid
July, 1962	5	13.70	13.45	13.45 Bid

Total sales and switches, 2,571 contracts.

Linseed—Sales dried up after sizable expansion of preceding week. Numerous paint manufacturers at that time filled out requirements through August, or to new crop. Shipping directions were at a good rate. Raw linseed oil, in tankcars, f.o.b., Minneapolis, was 13.4c. for June-September; 13.6c., October-December. Tankcars f.o.b. New York were reduced to 14.48c. because lower freight rates became effective.

Olive—Trading on spot was light, chiefly for actual needs. Business was noted at $2.35 to $2.40 per gallon, drums, exwarehouse, according to quantity. Interest in replacements from abroad was slow. Spanish oil was offered at $53 per 100 kilos, drums, f.o.b. ports and Tunisian, $57, drums, f.a.s. New York for prompt shipment.

Peanut—Crude was weaker with sales at 15¼c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was reduced to 18½c., tankcars, New York, prompt delivery.

Soybean—Market declined sharply with soybean futures. Crude closed lower at 11.20c. per pound, tankcars, f.o.b. Decatur, unrestricted, June delivery. Refined salad oil declined to 13.60c., tankcars, New York basis.

Export interest was moderate. Chile was in the market for 12,000 tons of vegetable oils and Mexico requested offers for 10,000 tons last week.

Tung—Higher support price of 3c. per pound for 1961 tung oil which started the upward price trend, further stiffened the market last week. Prices advanced at least 1c. and moderate sales were noted up to 26½c. per pound, tankcars, New York for prompt delivery, with sellers holding for 27c. Offerings were scarcer because of the difficulty of getting replacements from the Argentine. Sales of government oil at higher prices also were a contributing factor. Drums ranged from 28c. to 28½c., spot as to quantity.

CCC sold government owned oil at an increase of 85 points last week above previous business. Sales of 600,000 pounds took place at 25.72c. to 25.82c. per pound, bulk, f.o.b. Marrero, La., for unrestricted use, against 25c. two weeks ago. Bids were received for 2,370,000 pounds.

Miscellaneous

Cocoa Butter—Trading was slow. Spot stocks were unchanged at 54c. to 59c. per pound, depending upon quantity.

Copra—Market was slightly lower. Sales were reported at $151 per ton, c.i.f. Pacific coast, prompt shipment and $152.50 was asked.

Flaxseed—Price fluctuations increased trading on to-arrive basis. Bids were raised 3c. to $3.18 a bushel early and the business was accomplished ahead of decline to previous level. Much seeding has been delayed because of weather conditions. Bids were at $3.15 a bushel, spot and to-arrive, basis Minneapolis.

Fats and Greases

Greases—Market continued weak and dropped ⅝c. Offerings were liberal with trading slow. Choice white was nominal at 6½c. per pound, tankcars, delivered and yellow grease, 5¾c., same basis. 9.50c. per pound, drums, Chicago.

Lard—Prices were fractionally lower. Trading was slow. Cash lard declined to 9.40c. per pound, drums, Chicago.

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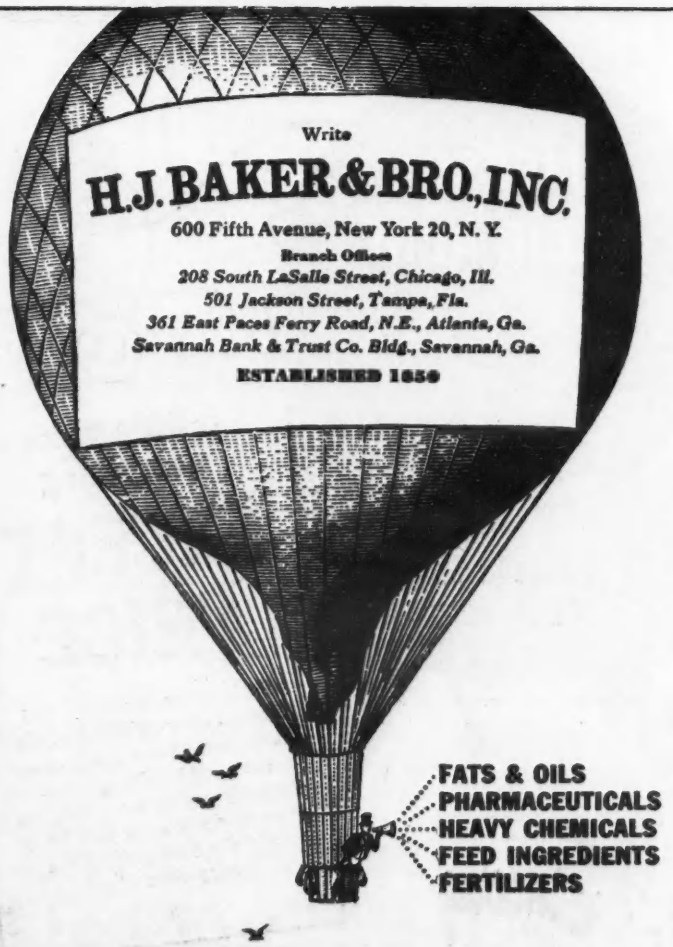

Oils, Fats and Waxes

Tallow—Price trend continued downward and was off 5/8c. for most grades. Business was limited at the decline. Bleachable fancy was sold at 6¼c. per pound, tankcars delivered; prime was nominal at 6c.; guaranteed fancy sold at 6¼c.; special was nominal at 5⅞c.; No. 1, 5¾c., and edible, 8¾c., same basis. Export interest was spotty. Guaranteed fancy was lower at 6½c., bulk, f.o.b. steamer and 1c. higher for drums.

Fatty Acids

Lower cost of tallow was reflected in animal fatty acids and quotations were reduced ¾c. for oleic, stearic and tallow fatty acids. Vegetable acids were unchanged and quite steady. Consumer demand was moderate and deliveries against recent orders continued to move in good volume.

Cake and Meal

Cottonseed Meal—Stocks were light and new crop will not be available until late August. Demand was slow. Small lots were firmer at $63 per ton, sacked, Mississippi Valley and $69 to $70, Georgia-Carolina.

Linseed Meal—Weakness persisted in this market, reflecting continuation of slow demand and moderate production. Excellent pasture conditions cut further into demand for feeds. Prices dropped 50c. a ton and roundlots could be traded at 50c. to $1 under crusher quotes. Shipping directions were only fair. Extracted meal, 34 percent protein, in carlots, f.o.b., Minneapolis was quoted at $49 a ton. Old process meal was down $1 to $2 at $55.50 for June and $58.50, July-August.

Peanut Meal—Supplies are ample for slow demand. Solvent meal, 45 percent was slightly lower at $64.50 per ton, sacked and old process, $66.50, Alabama-Georgia area.

Soybean Meal—Firmer undertone developed in this market after early weakness. Demand continued best in western markets and supplies were tight, and indications developed of firming in the East. Production was curtailed in some areas and other plants will be faced with shutdowns because of dislocation of soybean supplies. Unrestricted meal was unchanged, other markets steady to 50c. down. Meal, 44 percent protein, was quoted at $64 a ton, unrestricted, bulk, Decatur, prompt delivery.

Waxes, Vegetable

Consumers continued to limit purchases to actual needs. Prices were without change on spot delivery but competition continued keen. Reports from Brazil were to the effect that the government contemplated raising the floor price soon for carnauba fatty grades 10c. per pound and yellows, 15c. Trading for shipment was quiet and offers were limited, especially for yellow grades. No. 3 Ceara crude was available at 58c. to 60c. per pound, spot as to quantity and Parnahyba, 2c. higher. No. 1 yellow Ceara was well held at 82c. to 84c., spot and Parnahyba was 3c. higher. Other vegetable waxes were quiet and without price change.

OPD Reports

Chemicals in Ferment

—Continued from page 7

German accounting law to its total dividend payout, were $740,000.

Recently Laporte acquired Howard & Sons, Ltd., in Britain and it has been busily establishing operations in the US, Canada, Australia, India and North Africa. Acquisition of EWM will now enable it to set up activities inside the Common Market.

Chemische Fabriek "Naarden" claims that its tall oil distilling plant to cost $4.4 million will be Europe's first such installation. It will be built at Wormerveer, in Holland, and is planned for completion in about two years.

Kemi Oy, Finnish cellulose producer, will supply raw tall oil for the plant as a by-product of its Finnish plants. The know-how for the distilling process comes from Union Bag-Camp Paper Corporation, of the US, and the plant will be similar to the one Union Bag has in Savannah, Ga. Naarden will operate the plant and do research and development in tall oil. A new firm, Naarden-Kemi, has been set up to own the facility.

ICI Bids High for Settle

Imperial Chemical is offering stock worth $3.7 million for the capital of Settle Limes, valuing the Settle shares at nearly 50 percent above their previous market value. The directors of the small company have not announced whether they will resist the ICI bid or recommend its acceptance.

Directors of Burt Boulton & Haywood, Ltd., British timber and chemical firm, however, are fighting vigorously against the take-over bid by Horlicks, Ltd., malted milk producer trying to diversify into chemicals (OPD, 5/29/61).

Clincher in the Burt argument is its claim that over the past five years earnings of Burt have risen 132 percent, against a 3 percent gain for Horlicks. As a positive incentive to its shareholders to turn down Horlicks, Burt raised its dividend by 60 percent.

Inter-relations of the two firms with German companies is also at issue. Hor-Hoechst AG in the Common Market and Burt has a joint company, Baywood Chemicals, with Farbenfarbriker Bayer. Burt says Bayer will end the venture if Horlicks is successful in its take-over bid.

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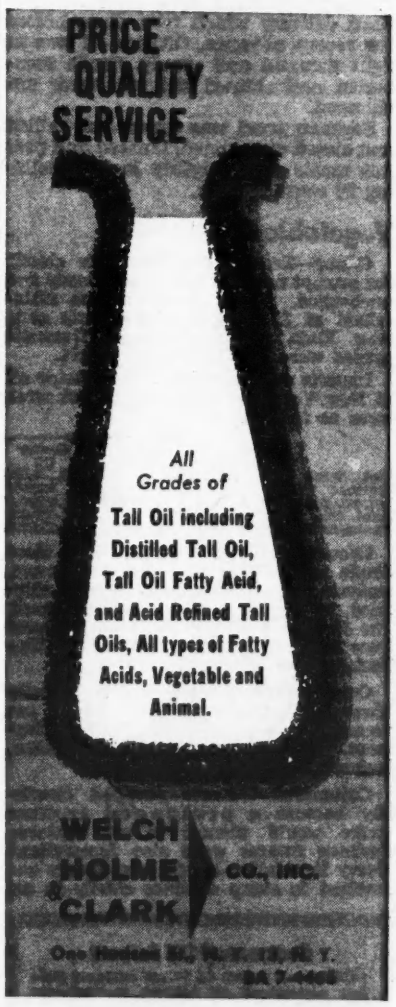

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Cyclohexane: 'Benzene of Tomorrow'

OPD 'Depth' Report on Cyclohexane

—*Continued from page 9*

ent is loss of export demand from Canada. Into 1962, duPont of Canada will take up to 12 million gallons annually from Phillips Petroleum Company.

By then, British-American Petroleum Corporation is expected to have on stream a 15-million-gallon-a-year plant to supply cyclohexane to the duPont Canadian affiliate.

But Phillips expects to pick up enough business elsewhere to more than overcome the deficit. In fact, there are persistent rumors that Phillips and Continental are on the verge of expanding.

Gulf, too, has been mentioned, but with the Port Arthur facility, it's believed a lengthier supply of benzene would solve the problem.

Cyclohexane Economics Tricky

The economics of cyclohexane production are tricky. For many years it has been known that Phillips recovered its cyclohexane from natural gas liquids, and therefore had quite an edge over benzene hydrogenation processes.

But Paul Endacott, Phillips' president, speaking before the National Federation of Financial Analysts Societies last May, said, "As a large producer of cyclohexane for nylon manufacture, heretofore we have obtained this product simply by fractionating it out of natural gas liquid mixtures. Now we are expanding output by chemically converting other components from the mixture."

Conoco has been thought to have an economic disadvantage in cyclohexane sales, being landlocked at Ponca City. But never say die! The company mixes cyclohexane and dodecylbenzene together at the refinery, pipes them to St. Louis, barges them down the Mississippi to Lake Charles, La., and separates them again to send them on their merry way.

Most petroleum companies on the sidelines today point out that if they got into the market, it would be through the benzene hydrogenation route. Several have been looking closely at cyclo recently.

But while future demand is expected to spiral dramatically, current producers are conceded to have an inside track on lining up customers. This means that potential makers would have to see a contract before building.

High-Purity Hydrogen Plentiful in US

Further, US producers now in business have a competitive edge because they have a plentiful supply of high-purity hydrogen. This commodity is scarce in Europe and Japan, and is becoming tighter even in this country.

Hence, in the US it's unlikely that anyone but a petroleum refiner would make cyclo. Overseas, high-cost hydrogen could price home-made cyclohexane out of the market.

Therefore, it looks like the US industry, as it now stands, faces a rosy future. How rosy it will be depends on what other petroleum refiner can snatch away upcoming business from current producers.

Cyclohexane Reprints Out Soon

OPD's special "depth" report on cyclohexane is being reprinted and will be available shortly. Copies may be obtained at 50 cents each (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church Street, New York 7.

Plant Food Tip: Don't Write Off the Farmer

—*Continued from page 7*

his tastes, new industrial frontiers are emerging, and the international position of the US has changed.

"The growth industries of the past fifteen years will not be the growth industries of the next ten years," he said. "The economy is going through a change in its growth characteristics. The major growth industries of the decade of the sixties are likely to be electronics, office equipment, space and missiles, drugs, housing, water and sewerage, and medical services."

Farm Workers to Decline

Henry L. Ahlgren, associate extension director of the University of Wisconsin, told the convention that during the next fifteen to twenty-five years American agriculure will continue to be an expanding industry in every important respect except one—the number of people required to operate the farms.

Williard M. Fifield, provost for agriculture at the University of Florida, amplified Mr. Ahlgren's point by emphasizing that the "core of agriculture in future years will be management."

Among the changes Mr. Ahlgren visualizes over the next twenty-five years in the agricultural industry are these:

- Commercial family farms will be larger.
- The agricultural plant will require more capital, more science and technology, more managerial ability, and more purchased production inputs.
- There will be an increase in the number of businesses supplying materials and services to farmers.
- Vertical and horizontal integration—especially of perishable commodities—will increase.
- Many products of agriculture will be produced according to specification and sold under contract.
- Farmers will have increased competition from industry-made substitutes for farm products and from foreign countries.

Through closer management, Mr. Fifield said that by 1985 farmers will be better organized as a group, both by cooperative and political action. Farmers will plan their operations with computing equipment for determining production goals, what factors to use and how much, shortages, best crops for specific seasons, best marketing methods, and most any phase of production and marketing one can think of.

Costs of marketing will rise and the farmers' share of the food dollar will diminish, he added, but this in turn will bring pressure for cost-reducing research in the area of marketing and cost-reducing research in production. He predicted giant strides being made in both areas.

Secretary of Agriculture Orville Freeman gave large credit to the fertilizer industry for the "age of abundance in agriculture" but said that the farmer's economic well-being in relation to the total economy has slipped to where today he is in "real trouble."

Mr. Freeman defended the administration's controversial farm bill against charges of regimenting agriculture and described it as an attempt to lift farm income to a level commensurate with that of other sectors of the economy.

Allied to Acquire Plant Site For Commercial Film Debut

Arrangements to acquire a plant site near Pottsville, Pa., for its first commercial plant to produce plastic films are being completed by Allied Chemical Corporation.

Initial products to be produced at the eastern Pennsylvania location will be the General Chemical Division's new "Aclar" fluorohalocarbon and "Capran" polyamide films. Both are specialty films currently in pilot plant production.

Conversion of the facility to produce the plastic films will begin in July with production scheduled prior to the year-end.

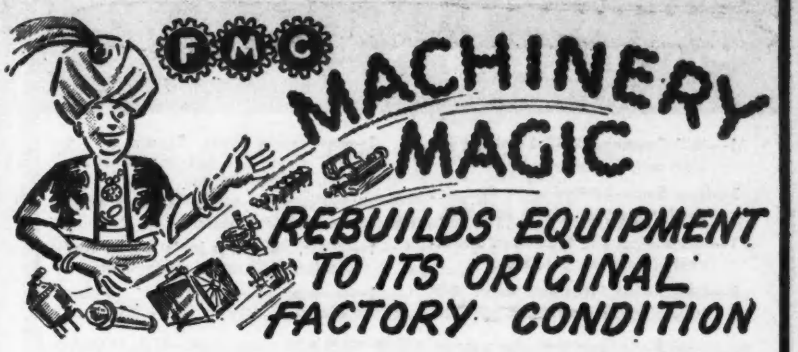
"Aclar" films are said to have unique combinations of properties conducive to use in critical packaging areas where their unusual moisture barrier qualities and transparency are required, and in electrical and electronic applications for such items as printed circuits, printed cables, electro-luminescent panels and insulation for capacitors.

Plant Food Institute Puts John Hall at Board's Helm

John W. Hall, of Potash Company of America, Denver, Col., was elected chairman of the board of National Plant Food Institute at the annual meeting last week in White Sulphur Springs, W. Va.

Elwood Lentz, of Western Phosphates, Inc., Salt Lake City, Utah, was elected vice-chairman of the board.

Re-elected were: President, Paul Truitt; vice-president, Raoul Allstetter; secretary, Louis Wilson, and treasurer, William Ritnour.



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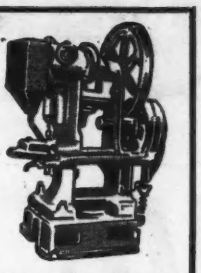

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Ball Mills and Pebble Mills by Abbe, Paterson, International, some Jacketed; up to 8' x 8'.
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Fitzpatrick Comminutators; Models D, K and C; motorized.
American Ring Roll Crusher; 50 HP.
Mikro S/S Atomizers; Nos. 6 and 5.
Raymond Imp Mills; many sizes.
Williams Hammer Mills to 60 HP.

EVAPORATORS—DRYERS

Buflovak S/Steel Thermo-Recompression Evaporator.
Link Belt Roto Louvre Dryer model 502-20.
Pittsburg Lectro Dryers, Bac 25 and BWC 3400.
Devine Vac. Chamber Dryers, Double Door Model No. 36.
Stainless Lab. Drum Dryer, 8" x 11½".
Bowen S/S Lab. Spray Dryer.

MIXERS ALL TYPES

BAKER-PERKINS STAINLESS STEEL SIGMA ARM LAB. MIXER, 6½" x 9½" x 11½".

Baker Perkins Jktd. 5 gal UNE-7, Dbl. Arm Mixer with Pressure cover; 30 HP.
Readco Jktd. 15 gal. Dbl. Arm Sigma Blade Mixer.
BLAW-KNOX 600 cu. ft. Conical Blender; 9'6" Dia.
Baker Perkins Jktd. Mixers, 50 gal., 150 gal., 200 and 300 gal.

NOW IN STOCK for IMMEDIATE DELIVERY. ALL SIZES FALCON Ribbon Blenders in Steel or Stainless.

CENTRIFUGES

Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.
2 Sharples Stainless Steel Model PN14 Super-D-Canters.
4311 S 1 Sharples C 27 Super-D-Hydrator in Type 316 Stainless with 40 HP motor.
5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".
2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.

REACTORS—PRESSURE VESSELS

2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.
6 Dorr-Oliver Stainless Steel Thickeners or Reaction Vessels; 550 gal. 5' x 5'.
Stainless Reactor, 2000 gal. Fully Jktd. Agitated.
Lancaster Stainless Lined Rotary Reactor or Digester; 50" x 17'4"; Jacketed; good for 300 PSI Internal.
Pfaudler Gl. Lined Reactors; all sizes from 50 to 1000 gal.
Mojonnier Stainless Vac. Pans; 3'x10' and 6'x12'; others.
2 MONEL Clad 2800 Gal. Reactors; 6'8" x 13'5"; Agitated; Jktd. 175#.

COLLOID MILLS

Premier Stainless Model U3; 6" with 15 HP Motor.
Eppenbach QV8 with 5 HP motor.
Chemicolloid Stainless Homogeniezr 15 HP; 3525 RPM.
Cherry Burrell Stainless Sanitary Homogenizer Size 1500; 25 HP.
Flowmaster Kombinators Model 200.

PLASTIC and RUBBER EQUIPMENT

Unused F-B 14" x 30" Two Roll Mills
Good used 2 Roll Mills, 12"x24", 22"x60"
6 Southwark Presses, 36" x 36", 14" Ram
Stewart-Boiling Press 36" x 36", 22" Ram
HPM Self Cont. Presses, 7 and 25 Ton
EXTRUDERS: NRM 1½"; NRM 6" Rubber Tuber. NRM 2½" Oil Heated
Hartig 4½" and El. Htd. Extruders
VULCANIZERS: 6'x16', 41"x54", 2'x4', others
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Baker Perkins 150 Gal. Disp. Mixer, 150 HP
J H Day Mogul Mixer 150 Gal. V/Cov. 75 HP
Baker Perkins 5 Gal. Disp. Mixer, 30 HP

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3" x 2" Monel. 5'3" x 8' Stainless.
(2) 5'3" x 3" Steel or Rubber.
Feinc S/S Rot. Vac. Filter 3' x 1'.
Oliver Cont. Rot. Vacuum Filters.
Panel Type; 8' x 8' and 8' x 10'.

FILTERS—FILTER PRESSES

4 Pressure Filters 30" x 56" Type 316 Stainless; 100 sq. ft.
Sparkler Steel Filter Model 33 S 17.
S/S Nutsche Type Filter; 6' x 2'.
Bowser Filter with Pump; 2000 GPH.

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Aluminum Tanks 2000 gal.
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78"x18'x¼" Vulcan 318 SS Bubblecap, 14 trays, 100 caps/tray, 50 PSI.
72"x30'x⅛" Budd 347SS Bubblecap, 21 trays, 38 caps/tray.
48"x41'x5/16" Vulcan 316SS Bubblecap, 40 trays 70 caps/tray PSI.
36"x21'x¼" 316 ELC SS Packed, 15 PSI.
36"x20'x3/16" Vulcan 316SS Packed 100 PSI.
14"x17'6"x⅛" 316 SS Packed.
12"x18'8"x3/16" 347SS Packed 100 PSI.
18'x46'—7' cone bottom, ¼" 316SS Packed Absorber Column Stainless Packing.

COLUMNS

72"x16'9"x⅜" Copper 8 Bubblecap trays.
48"x25'x⅛" Copper 35 Bubblecap trays.
42"x28'x⅜" Copper 40 Bubblecap trays.
36"x11'6"x⅛" Copper 15 Bubblecap trays.
20"x27' GLASS LINED 50 PSI full vacuum.
16"x21' GLASS LINED Scrubber.
16"x10' GLASS LINED 25 PSI full vacuum.
84"x25'x⅜" Steel 8 Bubblecap trays.
60"x68'x5/16" Steel 35 Bubblecap trays.
36"x58'x5/16" Steel 35 trays with Reboilers.
30"x61'x⅜" Steel 24 trays.

CENTRIFUGES—FILTERS

Sharples C-27 Super-D-Hydrator Stainless.
Sharples C-20 Super-D-Hydrator Stainless.
40" Fletcher Susp Centrifuge Perf. 15/7½ HP.
30" Susp Centrifuge—Imperforate Stainless.
Sharples #6 Super Centrifuge Stainless Bowl.
5'3"x3' Oliver Precoat Rot Vac Filter SS
4'x1' Bird Young Rot. Vac Filter Stainless.
36"x24" Goslin Rot. Vac Filter Stainless.
48"x36" Stainless Nutsche Filter.
#11 Sweetland 640 Sq. ft. 48 Stainless leaves.
18"x28" Bird Continuous Stainless.

DRYERS—KILNS

8'8"x70' Ruggles Cole Dryer.
8'x60'x⅜" Al. Chalmers Welded Kiln
7'x120'x9/16" Bethlehem Fdy. Kiln.
7'x45'x½" Link Belt Welded Kiln.
604-24 Roto-Louvre Dryer Stainless Steel.
6'x124'x¼" Vulcan Kiln.
502-16 Roto-Louvre Dryer.
4'x40'x¼" Welded Dryer NEW Shell.
3'x16' Stainless Rotary Dryer.

REACTORS

Pfaudler 500 gal. ELL Gl. Lined Jktd. Agit.
Dopp 1700 gal. Ni-Resist Jktd. Agit.
Dopp 1000 gal. Ni-Resist Jktd. Agit.
Vulcan 1000 gal. Everdur Coiled, Agit.
Patterson 1000 gal. Steel Jacketed.
Buflovak 900 gal. Stainless Agit. Elec. Heat.
Patterson 500 gal. Steel Jktd. Agit. 2 HP XP.
Alloy Tank 750 gal. Stainless Pressure Still.
Alloy Tank 300 gal. Stainless Pressure Still.

COMPRESSORS VACUUM PUMPS

Clark 9920 CFM 149 PSIA Suct 239PSIA Dis.
Al. Ch. Centrifugal 7500CFM @ 42.5PSI, 1250 HP.
Nash #9 Compressors 2150 CFM @ 16 PSI.
Worthington YO 1360 CFM @ 35 PSI; 150 HP.
Worthington 1015 CFM @ 35 PSI Steam Driven.
Norwalk Hydrogen Compressor 5 CFM 1500 PSI.
Nash #4 Vacuum Pump 650 CFM @ 15".

STAINLESS STEEL TANKS

11000 gal. 12'x15'x3/16" Agitated.
11000 gal. 3'x29'6"x3/16" dished 25 PSI.
4500 gal. 6'x25'x¼" dish/cone 25 PSI coiled.
4000 gal. 8'x12'x3/16" dished Coiled.
3500 gal. 8'x9'x5/16" dished heads.
1500 gal. 6'x6'9"x¼" dished heads.
1200 gal. 5'x8'x¼" Agitated.
750 gal. 4'6"x6'x¼" dished 42 PSI.
500 gal. 4'x5'x5/16" dished heads.
500 gal. 4'x5'6"x¼" flat Agitated.
(20) Tanks 50 to 400 gal. some agitated.

TANKS

12000 gal. Aluminum 10'x23'3" dished heads.
10000 gal. Aluminum 9'x23'3" dished heads.
7000 gal. Aluminum 10'x14' dished heads.
3500 gal. Copper 8'x9'x⅛" dished Coiled.
2000 gal. Copper 7'x7'x⅛" dish Agit Coil.
500 gal. Copper 4'x5'x5/16" dished Coiled.
20000 gal. Steel 12'x24'4"x⅞" dished 100 PSI.
10000 gal. Steel 8'x30' dished Coiled.
10000 gal. Steel 8'x30'x⅜" dished 60 PSI.
6500 gal. Steel 7'6"x28'x⅛" dished.
2500 gal. Heresite lined 5'x15'6", 68 PSI.
2250 gal. Steel 6'x19'x5/16" dished 114 PSI.
1250 gal. Steel 5'x8' dished Agit. Coil.

HAMMERMILLS—CRUSHERS

Penna 5X13 150 TPH, 400 HP Synch. Drive.
Dixie Mogul #5060 Manganese Lined.
Raymond #50 Imp Mill Model C2-855.
Bacon Hevi-Duty Style B 20"x6" Jaw Crushers.
Universal 8"x6" Jaw Crusher Manganese Jaws.
Sturtevant 8"x5" Double Roll Crusher.

SPECIAL ITEMS

TRIPLEX PUMP—2¼x4 Stainless 2000 PSI.
BLOWER 2500 CFM 10 PSI Read Standardair.
GAS PUMP 20"x20" Roots Connersville "RS."
GAS METER 8"x24" Roots 60000 CFH.
CRYSTALLIZER Squire 40"x30" Agit, Jktd.
CRYSTALLIZER Buflovak 6' Vacuum Jktd. Agit.
CRYSTALLIZER Swenson 24"x20' Jktd.SS 304.
AIR DEHYDRATOR-Anders 8FA Automatic.
ABSORPTIVE DRYER- Kemp FE02-S Dual Tower.
WHIZZER Raymond 30" Double.
SIFTER 30"x96" Roball STAINLESS Screen.
SIFTER 40"x84" Roball Single Deck.
SIFTER 60"x84" Rotex STAINLESS 1 Deck.
SIFTER 48" Sweco-Triple Deck Model A1942.
CONVERTER—St. Wells 10'x29' 10000 sq. ft.
FURNACE—St. Wells 1MM/BTU Oil fired.
HEATER 150KW Hot Oil Hynes Elec. Co.
BRIQUETTE PRESS Komarek Greaves 27"x24".
MIXER 300 gal. B.P. STAINLESS Sigma 18 DIM.
BLENDER Conical 6' Paterson 69CF 10 HP.
BLENDER Conical 12' Paterson 500CF SS clad.
EVAPORATOR—435 Sq. ft. Single Effect.
TUBE MILL Al. Ch. 7'x24' Mang. Lined 500 HP.
BALL MILL Traylor 9'x11' Steel Lined 300 HP.
CENTRIFUGAL PUMPS—STAINLESS—1" to 3" 10 to 750GPM 35 to 100' Head.

CONDENSERS HEAT EXCHANGERS

983 Sq. ft. All Copper ⅝"x16ga.x8' Tubes.
760 Sq. ft. All Copper ¾"x14ga.x14' Tubes.
246 Sq. ft. All Copper ¾"x16ga.x12' Tubes.
6931 Sq. ft. Steel 2"x11ga.x12' Tubes.
1056 Sq. ft. Steel ¾"x16ga.x10' Tubes.
141 Sq. ft. Steel ¾"x14ga.x8' Tubes.

STAINLESS HEAT EXCHANGERS

2320 Sq. ft. 33"x21'—1"x16ga.x16' Tubes.
1000 Sq. ft. 27"x168"—¾"x16ga.x14' Tubes.
890 Sq. ft. 22"x20'8"—⅝"x16ga.x14' Tubes.
800 Sq. ft. 23"x17'10"—¾"x16ga.x16' Tubes.
615 Sq. ft. 22"x15'9"—⅝"x16ga.x10' Tubes.
420 Sq. ft. 18"x9'6"—¾"x10ga.x8' Tubes.
300 Sq. ft. 14"x19'6"—¾"x18ga.x12' Tubes.
235 Sq. ft. 16"x8'3"—⅝"x16ga.x7' Tubes.
188 Sq. ft. 11"x16'8"—⅝"x14ga.x12' Tubes.
146 Sq. ft. 11"x13'10"—⅝"x16ga.x9'6"Tubes.
68 Sq. ft.8"x17'3"—¾"x16ga.x16' Tubes.

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1—American 36x42x84" Autoclave, jacketed, quick opening door each end.
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1—Abbe #8 Steel Ball Mill, 20 gal. cap.
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CENTRIFUGE—ATM Susp. 48" 316 S.S., 50 HP.
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Blaw Knox SS 100 gal. Autocl, agtd. 1000 psi
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Simpson 24" SS Lab. Mix Muller, 1½ H.P.
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5—Shriver #1 & #9 Diaphragm Pumps.
1—Homo Mixer #1H—1 H.P. XP Motor.
3—Lightnin Agitators 7½ H.P. 1200 rpm.
1—Charlotte ND20—S.S. Colloid Mill XP Motor—600 gph.
2—Worthite S.S. Pumps 8" x 6"; 3" x 2".
1—Stainless Steel 30 Gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
2—Cyclotherm Package Boilers 10 & 30 H.P.—#2 Oil—Fully Automatic.
4—Stainless Vacuum Receivers 50 to 100 Gals. 250 psi.
5—Day Horizontal, Steel & Stainless Steel Spiral Blenders 400 & 2000# Cap.
2—Steel Ball Mills 4' x 5'.
1—N. J. Model 84MX Pony Labeler.
1—Patterson S.S. Gyro Sifter 20" x 48".
4—Rotex Screens 30" x 96" to 60" x 84".
1—Kent High Speed Roll Mill 13" x 32".
1—Pfaudler 800 Gal. G.L. Jack. Tank w/Ag.
2—Day 40 Gallon Pony Mixers, M.D.

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Obituaries

Bernhart Troxler

Bernhart Troxler, retired inventor of several smokeless powder technics and a former official of Hercules Powder Company, died June 5 in Newark, N.J. He was seventy-seven years old.

Mr. Troxler retired from Hercules nine years ago, where he had been in charge of the smokeless powder department.

E. Stanley Brown, general manager of product development and process engineering for California Texas Oil Corporation, died June 14 in Bronxville, N.Y. He was sixty years old.

William A. Schneider, treasurer of Burroughs Wellcome & Co., Tuckahoe, N.Y., pharmaceutical manufacturers, died June 13 in North Tarrytown, N.Y. He was sixty-one years old.

Walter E. Seibert, sr., mining company executive, died June 7 in Westwood, N.J. He was fifty-nine years old. Mr. Seibert was founder and president of a number of mining companies in the US and Canada, including several fluorspar operations and Sybouts Sodium Sulphate Company, Ltd., of Saskatchewan.

Donald N. B. Trimble, assistant to the director of industrial relations of Sinclair Oil Company, died June 13 in Norwalk, Conn. He was thirty-four years old.

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Acetylene, Oxygen and Argon Gas, including replacement of valves and hydrostatic testing of cylinders when required—790,000 cubic ft. Definite quantity contract for the needs of Letterkenny Ordnance Depot for fiscal year 1963. Bid IFB ORD-36-005-61-98B, June 27. Letterkenny Ordnance Depot, Purchasing and Contracting Division, Chambersburg, Penn.

2—OLIVER PRESS PRECOAT FILTERS 5'3"—Type 316 S.S.

4—RIBBON BLENDERS, 2500 gal., 1200 gal.

2—AUTOCLAVES S.S., 50 gal. 2000 lb., 3½ gal., 2000 lb.

1—DRUM DRYER, Proctor & Schwartz.

4—COLLOID MILLS, 5 HP EX PR., 15 HP, 40 HP.

Machinecraft Corporation
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14 SHREDDERS* (Mixers) Baker Perkins, size 17 VL/BB brine Jacketed, double sigma blade, double screw tilt, sleeve bearing type, working capacity 200 gals., total capacity 320 gals., front blade speed 27.5 rpm, back blade speed 18 rpm. 20 H.P. motor 220/440 V.

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Evaporators—Swenson 250 ton capacity, rubber lined Karbate and Lead Construction.
Tanks—Rubber lined, NEW—Various Sizes. All welded, 8' x 30'—12,500 gal. fuel storage.
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Crusher—American Pulverizer Co., #AC—2 Ring type, Drop bottom cage, 75 H.P. Motor 1,200 rpm.
Screen—Robbins Vibrex Type—DD 60 x 168. Style M. 10 H.P. Motor.

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2—Kilby NICKEL Dbl. Effect Evaporators, 2000 sq. ft. ea. effect.
1—Kilby NICKEL Single Effect Force Feed Evaporator, 1200 sq. ft. Above with condensers, piping and pumps.
2—12,000 gal. NICKEL Clad Tanks, 12' x 14'.
5—8,500 gal. NICKEL Clad Tanks, some agitated.
1—1,000 gal. NICKEL Clad Tanks, 5' x 8'.
2—Oliver 5'3" x 4' NICKEL Clad Rotary Vacuum Salt Type Filters.
2—Pfaudler 300 and 200 gal. Glass Lined Jacketed Agitated Reactors.
1—Sperry 30" C.I. Filter Press, 27 chambers.
1—Buflovak 32" x 90" Double Drum Dryer.
4—Feinc 8' x 12' Rotary Vacuum Steel Filters, string discharge.
1—Peabody Gas Scrubber stainless steel 11,000 CFM at 145°F with fans and XP motor.
1—Peabody Gas Scrubber stainless steel 6,000 CFM at 125°F with fan and XP motor.
2—6'6" dia. x 60' Rotary Dryers.
1—5½' x 4½' x 50' Rotary Dryers.
1—5½' x 4½' x 60' Rotary Dryer.
3—Dorr 80' dia. Thickeners with agitator and drive.
4—Dorr 40' dia. Thickeners with agitator and drive.
3—Vogt 387 sq. ft. Rotary Pressure Filters.
2—Chicago Pneumatic 26" x 14" Vacuum Pumps with 150 HP motors.
3—Fuller Kinyon Pumps H5 and H6.
1—Link-Belt 24" x 90' Troughing Belt Conveyor.
5—NICKEL Centrifugal Pumps, 2", 3".

1—Raymond #73612 Super High Side 6-Roll Mill, with whizzer cyclone, piping and motors.
1—Raymond #6669 Super High Side 6-Roll Mill, with whizzer, cyclone, piping and motors.
1—Raymond 12' dia. Double Whizzer Air Separator.
2—Sturtevant 14' dia. Air Separators.

Partial Listing — Send for Complete Details

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

BRILL FOR VALUES

CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
2—Bird 24" x 38" Solid Bowl Continuous 304 SS.
1—Bird 40" x 60" solid bowl continuous, 316 SS, UNUSED.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—Pfaudler 125 gal. 304 SS jacketed agitated Reactor, 150# int., 125# jacket.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
2—Pfaudler 850 and 650 gal. Steel jacketed agitated Reactors.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—O. G. Kelly 3000 sq. ft. 309 S.S. forced feed Evaporator UNUSED.
1—550 sq. ft. Buflovak monel single effect Evaporator.
10—400 to 1200 gal. vertical 304 S.S. Tanks, open and closed.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
5—2700, 2200 gal. 304 S.S. Vertical Agitated Tanks with Coils.
1—4200 gal. 316 SS verticals Tank, 8' x 12'.
1—5500 gal. 316 SS clad pressure Tanks, 250 psi.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—10,000 gal. rubber lined Tank, 10' x 17'6".
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
4—Stainless Heat Exchangers; 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 4' dia. monel, horizontal Filter.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 3' x 1' 316 SS Rotary vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

1—Buflovak Vacuum Shelf Dryer with 17—60" x 80" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9' single drum, atmospheric Dryers.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Stokes 4' x 20', 304 SS, Rotary Vacuum Dryer.
6—Louisville Rotary Steam Tube 5'x25', 6'x30', 6'x50' Dryers.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Louisville 4-1/2' x 25' Inconel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
1—Stokes Model 38-A Tray Dryer with 16—36" x 36" SS shelves.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
2—Wyssmont Dryers, 304 SS, 6'2" and 9'6" dia.

MIXERS

1—Abbe 110 gal. 304 SS Jacketed Agitated Vacuum Dispersal Mixer.
2—Day Imperial 150 gal. jktd. double arm.
2—Baker Perkins 150 and 100 gal. jacketed double arm sigma blades.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Day 1500# Powder Mixer 304 S.S.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—2' dia. Simpson Intensive Mixer, 304 SS.
1—45" dia. Lancaster Mixer, 7-1/2 HP motor.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.
1—Patterson 80 cu. ft. conical Blender, 304 SS.

MISCELLANEOUS

3—Kinney Vacuum Pumps, 1000 cfm, 10 micron, 15 HP.
3—Mikro Pulverizers, 1 SH, 1S1 and Bantam.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
3—Mikro Pulverizers, 1SH, 1S1 and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.

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PERRY FOR PROCESS EQUIPMENT

RECENT PURCHASES

4—UNUSED Sharples #AS-16V Inconel centrif.
2—2700 gal. T304 tanks, coils, agit.
6—30" OD x 19' high T304 SS packed columns.
1—Bird 24" x 38" T304 SS centrif.
5—F. J. Stokes 195 sq. ft. vac. shelf dryers, (16) shelves 40" x 44", model #138J-16.
1—Stokes 3' x 15' T304 SS rot. vac. dryer.
1—Raymond 66", 6-roller hi-side mill.
1—Fischer 36" x 40" Single drum dryer.

KETTLES — REACTORS

1—2000 gal. Glascote blue glass-lined reactor, jacketed, ASME 50 psi or vac. int., 90 psi jkt.
1—1800 gal. T316 SS jacketed reactor, 5 HP Agit.
3—1350 gal. T347 SS jkt. kettles, Agit.
1—750 gal. Pfaudler blue G/L jkt. reactor.
1—750 gal. Graver T304 SS jkt. fermenting kettle, shell jacket, ASME 30 psi, 10 HP Agit.
1—600 gal. Bartlett & Snow Stainless crystallizing kettle.
6—465 gal. Downingtown T304L SS reactors, 150 psi, internal, 165 psi jkt.
1—300 gal. Pfaudler blue G/L jkt. reactor, Agit., ASME.
1—300 gal. Glascote blue G/L jkt. reactor, Agit., ASME.
1—225 gal. Stainless jkt. reactor, 200 psi jkt., vac. int., Agit.
1—175 gal. Stainless jkt. reactor, 100 psi jkt., Agit.

DRYERS

1—Buflovak 32" x 72" Twin-Drum Dryer, Chrome-Plated, Stainless Conveyors, Hoods, etc. Late Model!
5—Buflovak 42" x 120" Drum Dryers, ASME 160#.
1—American 42" x 120" dbl. Drum Dryer, ASME, stainless.
1—Buflovak 42" x 90" dbl. Drum Dryer.
1—American 36" x 84" Dbl. Drum Dryer, ASME, Vacuum.
1—Buflovak 5' x 12' Single Drum Dryer, Vacuum.
1—Fischer 36" x 40" Single Drum Dryer.
1—Buflovak 32" x 52" Dbl. Drum Dryer, ASME 100# WP.
1—Buflovak 110 sq. ft. Vacuum Shelf Dryer.
5—Stokes 195 sq. ft. Vacuum Shelf Dryers, #138J-16.
2—Davenport 8' x 60' Rotary Dryers, 7/16" Welded, Burners, Fans, etc.
1—Louisville 4'6" x 25' Rot. Steam-Tube Dryer, Welded.
1—Hardinge 4' x 30' Rot. Steam-Tube Dryer.
1—Bartlett 3' x 15' Rotary Dryer, Everdur Shell.
1—Nerco-Niro Portable Stainless Spray Dryer.

FILTERS — CENTRIFUGALS

3—Sweetland #12 Pressure-Leaf Filters, (72) St. St. Leaves.
5—Shriver 48" Cast Iron Filter Presses, 1250 sq. ft.
6—Valley 36" Aluminum Filter Presses, 1000 sq. ft.
1—Niagara #510-28 T316SS Pressure Filter.
1—Oliver 5'3" x 8' Precoat Rot. Vacuum Filter—Unused.
2—Oliver 5'3" Precoat T316 SS Rot. Vacuum Filters.
10—Davenport Dewatering Presses; #1A, 2A, 3A.
25—Sharples #AS-16V Super Centrifugals, Inconel, Sludge Disch.
3—Sharples #C-20, C-27 Super-D-Hydrators, T316SS.
2—Sharples #16-P cent., T304SS, Pressuretite.
3—Bird 24" x 24", Monel Slotted-Bowl.
1—Bird 24" x 38", Steel, Cylindrical Bowl.
2—Bird 24" x 38", T304SS Conical Bowl, 25 HP.
1—Tolhurst 48" Susp. Cent., T304SS.
5—A.T.&M. 40" Susp. Cent., T304SS Solid, 40/5 HP.
2—A.T.&M. 32" Susp. Cent., T304SS Solid, 30 HP.
1—Fletcher 30" Junior, T304SS Extractor, Perf.
1—A.T.&M. 12" Susp. Cent., T304SS, Perf.

MIXERS — MILLS

50—Baker Perkins #17, 200 gal. Sigma Jktd. Mixers.
1—Baker Perkins #16-UUEM, 150 gal. Dispersion Mixer, 150 HP XP Motor, 125# Jacketed, Vaulted Cover.
1—Baker Perkins #15-UUMM, 100 gal. Dispersion Mixer, 100 HP, ASME Jacket, Cored Blades, Compression Cover, Motorized Tilt.
1—Baker Perkins #15, 100 gal. Disp. Mixer, T347SS, Jkt.
1—J. H. Day #6 Cinc., 100 gal., Sigma Blades, Stainless.
2—J. H. Day #5 Cinc., 75 gal. Sigma Blades.
1—Gemco 60 cu. ft. T304SS Conical Blender.
13—Abbe 6' x 8' Pebble Mills, Stone Lined, 30 HP.
1—#2TH Mikro Pulverizer, 10 HP.
2—Hardinge 7' x 36" Conical Pebble Mills.
1—Allis-Chalmers 5' x 5' Contin. Ball Mill, 75 HP.
1—Raymond 50", 5-Roller Hi-Side Mill, Oil Journals.
1—Raymond 66", 6-roller mill, 200 HP.

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3—12,000 gal. vert., 11'-6" dia. x 15'-6" high, flat bottom, conical top, ¼" const.
18—11,500 gal. Pfaudler horiz. blue glass-lined, 8' x 30', ½" shell, dished heads, nickel coils.
18—3650 gal. vert., 10' x 7', closed, 3/16".
3—3000 gal. vert., T347 SS, 5' x 19', dished, ASME 60 psi.
60—1350 gal. horiz., T347 SS, 4' x 14', dished heads, ASME 60 psi, 38 sq. ft., int. coil, 3/16" shell, ¼" dished heads.
9—1300 gal. vert., T321 SS, 7' x 4'-6", closed.
3—1100 gal. vert., T347 SS, 4' x 11', dished, ASME 60 psi.
27—476 gal. vert., 4'-6" x 4', open top.
54—475 gal. vert., 5'-6" x 2'-6", open top, dished bottom.
27—445 gal. vert., 6' x 2', open top, dished bottom.
3—300 gal. vert., T347 SS, 4' x 3', ASME 60 psi.
9—285 gal. vert., 41" x 49", open top.
9—260 gal. vert., 40" x 48", closed.

KETTLES—REACTORS

72—Pfaudler 1400 gal. blue glass-lined kettles, 84" x 54", jacketed, open top, Stainless cover, 3 HP Agit.
18—Pfaudler 1250 gal. blue glass-lined jacketed reactors (Sulphonators), 72" x 72", closed heads, Agit., condenser.
54—Pfaudler 600 gal. Stainless jkt. crystallizing kettles.
72—Pfaudler 250 gal. blue G/L kettles, jkt., Stainless cover.

COMPRESSORS—BLOWERS

3—Worthington 3500 cfm air comp., #LTC-4, 500 HP gas drive.
1—Chi.-Pneu. 3026 cfm air comp., #19-32-30—18 x 24, steam driven.
3—Elliott 11,620 cfm turbo-blowers, #0, 125 HP.
18—Ing.-Rand #67D9 air comp., 6 x 6 x 5, type 30, 10 HP.
9—Spencer Stainless turbo-blowers 1200 cfm @ 3.5 oz., 3 HP.
40—Stainless blowers & fans, 24" to 42" dia.

BOILERS—HEAT EXCHANGERS—COLUMNS

3—Edgemoor 43.5 HP, 3000 cfm waste-heat boilers, ASME 250 psi.
5—Comb. Eng. 435 HP water-tube boilers, 300 psi, gas or oil fired.
6—1450 sq. ft. T347 SS vert. tubular gas condensers.
3—1000 sq. ft. Duriron Single-Pipe coolers or condensers.
3—564 sq. ft. T347 SS vert. tubular gas condensers (Ammonia burner-preheater), ASME 60 psi.
9—400 sq. ft. T304 SS pipe coolers, 2" ips sch. 40 pipe.
12—Amer. Spiral Stainless exchangers: 162, 73 sq. ft.
48—Duriron pipe coolers, open or jacketed: 170, 120, 110, 55, 50, 10 sq. ft.
16—Duriron 24" x12' packed columns.
1—24" x 33' Duriron & Stainless packed column.
3—18 sq. ft. Steel ammonia evaporators.

STEEL PRESSURE TANKS

9—28,000 gal. horiz. 11' x 38', dished, ASME 75 psi, some lined with lead & Acid-Proof brick.
2—11,000 gal. horiz., 8' x 27', dished, ASME 300 psi.
5—9000 gal. horiz., 8' x 24', ½" shell & dished heads.
54—5200 gal. horiz., 6' x 24', ½" shell & dished heads.

MISCELLANEOUS

25—Worthington 3" x 2" Worthite pumps, #2-CG-2B, 15 HP.
81—Worthington 2" x 1½" Worthite pumps, #1½-CG-1A, 5 HP.
35—LaBour 2" self-priming St. St. pumps, #15-DPL.
8—Graver 10' x 23' lead-lined concentrating drums, w/furnace, etc.
4—Cottrell 88 tube elec.-mist precipitators.
4—2800 gal. vert. Haveg tanks, 7' x 10', open.
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1—Pfaudler Model XL 1000 gal. glass lined jacketed reactor.

4—Patterson Kelley SS twin shell blenders, 4 qt. and 2 cu. ft.

1—125 gal. SS jacketed autoclave with impeller type agitator and drive, 125 psi jacket, 75 psi internal.

1—Banbury #1 mixer with 30 HP motor.

4—Pfaudler Series P, 5, 20 and 30 gal. glass lined jacketed reactors complete with agitators and drives.

2—Pfaudler Series R 5000 gal. glass lined jacketed reactors, NEW.

1—Pfaudler 750 gal. glass lined reactor, jacketed.

2—Pfaudler Series EM 300 gal. glass lined jacketed reactors.

3—Glascote 500 gal. glass lined vacuum receivers.

2—International SS horiz. jacketed double ribbon blenders, 40 cu. ft., complete with motors.

2—Process Equipment 10,000 gal. SS vertical tanks, NEW.

1—10,000 gal. horizontal rubber lined storage tank.

2—Stokes SS jacketed rotary vacuum dryers, 3'x15' and 2'x6'.

1—AT&M 26" type 316 SS suspended type centrifuge, complete.

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1—Sharples type 316 SS Super-D-Canter, PN-14, complete.

1—Sharples type 316 SS centrifuge, Model D-2.

1—Sharples C-20 Super-D-Hydrator, monel.

1—Oliver SS rotary vacuum filter, 3' x 2'.

1—AT&M SS 40" link suspended centrifuge with perforate basket and explosion proof motor.

1—Sperry 36" x 36" heresite covered filter press, 40 chambers.

1—Sturtevant #7 SS dustite rotary batch blenders, NEW.

1—Gemco type 316 SS jacketed conical rotary vacuum blender, 92 cu. ft.

2—Louisville SS rotary dryers, 8' x 50'.

1—Cleaver Brooks 500 HP package steam generator, 125#.

1—Cleaver Brooks 150 HP package steam generator, 150 psi.

1—Superior 300 HP package steam generator, 125 psi.

2—Mikro #3TH SS pulverizers, complete.

3—Pfaudler glass lined thimble type condensers, 9 and 14 sq. ft.

1—300 gal. Hastelloy "B" jacketed pressure reactor.

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2—Ball & Jewell #2 Cutters.
4—Link-Belt Vibrating Screens 4' x 8'.
1—Jeffrey Vibrating Conveyor.
1—30" Sperry Filter, closed del., 3-eye, 29-plates, 40-frames.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor.
1—Abbe Pebble Mill 5' x 22'.
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Advertisers' Index

Allied Chemical Corporation—Plastics Division 48
Allied Chemical Corporation, Solvay Process Division 43
American Cyanamid Company, Intermediates Department 49
American Cyanamid Company, Process Chemicals Department 59
American Firstoline Corporation 41
American Flange & Manufacturing Co., Inc. 28
American Lignite Products Co. 64
American Potash & Chemical Corporation .. 42
American Smelting and Refining Company 37
Arapahoe Chemicals, Inc. 55
Argueso, M., & Co., Inc. 63
Ashcraft-Wilkinson Co. 47
Baker, H. J., & Bro. 64
Baker, J. T., Chemical Co. 1
Barclay Chemical Company, Inc. 70
Becco Chemical Division, Food Machinery & Chemical Corp. 41, 46
Better Finishes & Coatings, Inc. 40
Biddle Sawyer Corp. 46
Bios Laboratories, Inc. 55
Blackman, Stanley, Labs, Inc. 54
Bower, Henry Chemical Mfg. Co. 43
Brill Equipment Company 67
Brode Corporation, The 64
Bzura Chemical Company, Inc. 49
California Chemical Company, Oronite Division 21, 22, 23, 24, 25, 26
Celanese Corporation of America, Chemical Division 17, 72
Chemical Manufacturing Co., Inc. 44
Chemical & Process Machinery Corp. 69
Chemical Service Corp. 70
Chemical Solvents, Inc. 72
Chemsol, Inc. 70
Church & Dwight Co., Inc. 33
Columbia Southern Chemicals (Refer to Pittsburgh Plate Glass Company, Chemical Division).
Commercial Solvents Corporation 1
Concord Chemical Company 72
Coupe, Robert A. 40
Cowles Chemical Company 34
Croda, Incorporated 64
Delhi-Taylor Oil Corp. 31
Devold, Peder, Oil Company, Division, Chas. L. Huisking & Co., Inc. 50
Dickinson, J. Q., & Co. 56
Distillation Products Industries, Div. of Eastman Kodak Company 39
Doggett, Stanley, Inc. 61
DuPont de Nemours, E. I., & Co., (Inc.) 46
Duval Sulphur & Potash Co. 47
Eastman Chemical Products, Inc. 61
Emery Industries, Inc. 63
Enjay Chemical Company, A Division of Humble Oil & Refining Company 29
Equipment Clearing House, Inc. 66
Erie Casein Dryers 62
Fairmount Chemical Co., Inc. 54
Felton Chemical Company, Inc. 58
Fiber Chemical Corporation 72
First Machinery Corp. 65
Fisher Chemical Co., Inc. 72
Fritzsche Brothers, Inc. 56
Gelb, R., & Sons, Inc. 69
Givaudan-Delawanna, Inc. 53
Gulf Oil Corporation 47
Harchem Division, Wallace & Tiernan, Inc.. 63
Harshaw Chemical Co., The 59
Heat & Power Co., Inc. 68
Heico, Inc. 72
Henry, J. F., Chemical Co., Inc. 43
Heyden Chemical Division, Heyden Newport Chemical Corporation 13
Hoffmann-La Roche, Inc. 2, 53
Hooker Chemical Corporation 41
Hooker Chemical Corporation, Phosphorus Division 42
Hutchinson, D. W., & Co., Inc. 56
Industrial Raw Materials Corp. 60
International Petrosolvents, Inc. 46
Lawler Company 69
Lebanon Chemical Co. 47
Lever Brothers Company 46
Loeb, H., & Son 69
Lucidol Division, Wallace & Tiernan, Incorporated 45
Machinecraft Corp. 67, 70
Machinery & Equipment Company 66, 67, 69
Machinery & Equipment Co., The 66
Magnus, Mabee & Reynard, Inc. 56
Marx Newman Co., Inc. 70
Meer Corporation 54
Merck & Co., Inc. 45
Michigan Chemical Corporation 50
Minute Maid Corporation, Citrus Products Division 57
Mississippi Lime Company 44
Morningstar-Paisley, Inc. 54
Morton Chemical Company 6
Nepera Chemical Co., Inc. 53
Neville Chemical Company 72
Norda Essential Oil & Chemical Company, Inc. 58
Old Dutch Mustard Co., Inc. 58
Olin Mathieson Chemical Corporation (Organic Chemicals) 51, 52
Pan American Sulphur Company 47
Pearsall Chemical Corporation 42
Penick, S. B., & Company 50
Pennsalt Chemicals Corporation, Industrial Division 1
Pennsylvania Refining Company 60
Perry Equipment Corp. 68
Pfister Chemical Works, Inc. 49
Pharmacaps, Inc. 53
Philipp Brothers Chemicals, Inc. 41
Pittsburgh Plate Glass Company, Chemical Division 15, 40
Plastics Division, Allied Chemical Corporation 48
Polak's Frutal Works, Inc. (PFW) 56
Polyvinyl Chemicals, Inc. 62
Prior Chemical Corporation 1
Process Plants Service, Inc. 66
Procter & Gamble Co. 46
Publicker Industries, Inc. 11
Raney Catalyst Co. 46
Read, Chas. L., & Co., Inc. 61
Reilly Tar & Chemical Corporation 6
Riches-Nelson, Inc 72
Richter, Gedeon Pharmaceutical Products, Inc. 53
Rohm & Haas Company 46
Rosenthal's, Joseph, Sons, Inc. 67
Ross, F. H., & Co. 43
Sergeant, E. M., Pulp & Chemical Co., Inc.. 43
Shamrock Chemical Corporation 64
Smith-Douglass Company, Inc. 42
Smith, Werner G., Inc. 63
Snow, N. J., Equipment Co. 66
Solvents & Chemicals Group, The 32
Sonbert Chemical Company 47
Spencer Chemical Company 48
Standard Collapsible Tube Co. 61
Stein Equipment Co. 69
Strohmeyer & Arpe Co. 64
Synthetic Products Company 62
Titanium Alloy Mfg. Division, National Lead Company 54
Union Carbide Chemicals Company, Division of Union Carbide Corporation 1
United Box & Lumber Co. 44
U. S. Borax & Chemical Corporation 1
U. S. Steel Corp. 49
United Ultramarine & Chemical Company, Inc. 62
Ventura Processors 27
Vitamerican Corporation 55
Wallerstein Company, Inc. 18, 19
Welch, Holme & Clark Company, Inc. 64
West End Chemical Company, Division of Stauffer Chemical Company 35
Wolf, Bill, Inc. 66
Wood Ridge Chemical Corporation 70
Wyandotte Chemicals Corporation 45
Zinc & Triest Co. 58

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Trade Name Chemicals

—Continued from page 59

named "Texin" which it is hoped will make possible large-scale production of urethane elastomer items by low-cost molding and extrusion methods.

Integrating backward, Nopco Chemical Company, reportedly the world's largest producer of urethane foams, is building a multi-million dollar plant at Linden, N.J., to produce TDI. The unit is slated to go on stream in early 1962 and will produce upwards of 10 million pounds of product annually.

Trade Name Briefs

SUPPLEMENTS: "Amprol," coccidiostat produced by Merck & Company has been cleared for use in turkey rations. The clearance is the same as that for broilers, with the exception that the product has not yet been cleared for use with bacitration.

The company reports high demand for "Amprol" will limit its use in '61, but through a multi-million dollar expansion program Merck hopes to provide added supplies of the new coccidiostat later this year.

PLASTICIZERS: Chas. Pfizer & Company has issued data sheets on the company's "Morflex" specialty plasticizers. Molecular weight of the four products offered ranges from 370 to over 600. Pfizer reports "Morflex X-1118" has potential use as a non-fogging plasticizer.

ANTIOXIDANTS: Researchers of Eastman Chemical Products think genistic acid and its sodium salt my extend the use of phenolic antioxidants in protecting fish and certain meat products in which antioxidants must be dispersed through the aqueous phase. Use of butylated hydroxytoluene and butylated hydroxyanisole, currently the most widely used phenolic antioxidants, is generally limited to food products which can be stabilized by dispersing the antioxidant in or through the fat phase. Until further testing can be completed Eastman will not offer the compounds except in research quantities.

SILICONES: Two new durable air-drying silicone water repellents for use of paper, textiles and leather have been put on the market by the Silicone Products department of General Electric. "SS-4053," is for industrial application and is designed for use where a material containing a non-flammable solvent is needed. "SS-4029" is suggested for consumer type applications and is designed specifically for pressure packaging.

IMPORTS at United States Ports

New York

AGAR—20 bgs, Meer Corp, Barcelona
200 bgs, Casablanca
ALGINIC ACID—30 dms, E Mendell Co, Havre
ALUM—230 bgs, C M C Chemicals Inc, Liverpool
ALUMINUM POWDER—10 dms, H Solodow, Bremen
75 dms, Hamburg
AMINOPROPANOL—6 dms, Rotterdam
AMMONIUM CARBONATE—177 dms, Rotterdam
AMYRIS OIL—4 dms, Port Au Prince
ANILINE DYES—36 dms, Geigy Chemical Corp, Rotterdam
36 dms, Carbic Hoechst Corp, Rotterdam
4 dms, General Dyestuff Co, Havre
44 dms, Heemsoth Kerner, Liverpool
22 dms, Sandoz Inc, Rotterdam
78 dms, Geigy Chemical Corp, Havre
4 dms, H Bruckmann & Lorbacher, Bremen
3 dms, Carbic Hoechst Corp, Bremen
4 dms, General Aniline & Film Corp, Hamburg
35 dms, Chemore Corp, Genoa
30 dms, H Bruckmann & Lorbacher, Hamburg
307 dms, Rotterdam
ANISE SEED—200 bgs, Malaga
ANNATTO SEED—128 bgs, M J Golombeck, Vizagapatam
64 bgs, L E Ransom Co, Vizagapatam
345 bgs, Peter Andrea Corp, Fortaleza
ARABIC GUM—254 bgs, National City Bank, Port Sudan
250 bgs, Irving Trust Co, Port Sudan
150 bgs, Morgan Guaranty Trust Co, Port Sudan
462 bgs, Stein Hall & Co, Port Sudan
256 bgs, Meer Corp, Port Sudan
300 bgs, Morningstar Paisley Inc, Port Sudan
250 bgs, Bank of N Y, Port Sudan
250 bgs, Brown Bros, Port Sudan
BEESWAX—175 bgs, Morgan Guaranty Trust Co, Porto Alegre
BENZOIN GUM—72 cs, Meer Corp, Singapore
BLANC FIXE—31 dms, C J Osborn Co, Rotterdam
BOIS DE ROSE OIL—10 dms, Hollander Trading Corp, Gallao
BONE—312 bgs, Lisbon
BONE CHARCOAL—320 bgs, Martin Baer & Co, Lisbon
CALCIUM ACID PHOSPHATE—5 dms, Westinghouse Electric Co, Hamburg
CALCIUM CARBONATE—2,200 bgs. Pluess Staufer, Antwerp
1,200 bgs, N H Weitzner, Antwerp
CALCIUM PHOSPHATE, DIBASIC—360 bgs, Wessel Duval & Co, Antwerp
CARAWAY SEED—250 bgs, Hoger Corp, Rotterdam
320 bgs, Rotterdam
CARNAUBA WAX—56 bgs, J W Hanson Co, Fortaleza
172 bgs, Irving Trust Co, Fortaleza
36 bgs, Smith & Nichols, Fortaleza
111 bgs, M Argueso & Co., Fortaleza
210 bgs, Cornelius Wax Refining Corp, Fortaleza
45 bgs, S C Johnson & Son, Fortaleza
145 bgs, Frank B Ross, Fortaleza
201 bgs, Frank B Ross, Natal
200 bgs, Cornelius Wax Refining Corp, Salvador
CASEIN—3.599 bgs, A J Mills & Co, Wellington
5,586 bgs, A J Mills & Co, Auckland
12,375 bgs, A J Mills & Co, New Plymouth
1,000 bgs, N Y Sancor Corp, Buenos Aires
500 bgs, L N White & Co, Buenos Aires
1,000 bgs, F C Gerlach, Buenos Aires
150 bgs, First Spice Co, Rotterdam
226 bgs, National Casein Co of N J, Rotterdam
2,000 bgs, E Lang, Buenos Aires
500 bgs, Crawford Kish & Co, Gdynia
500 bgs, F H Paul & Stein Bros, Oslo
1,000 bgs, Rotterdam
1,000 bgs, Buenos Aires
CASHEWNUT SHELL LIQUID—100 tons, Minnesota Mining & Manufacturing Co, Mangalore
CASSIA—1.066 bls, C M Van Sillevoldt, Antwerp
1,672 bls, Rotterdam
CASTOR OIL—300 tons, Woodward & Dickerson, Salvador
500 tons, Baker Castor Oil Co, Salvador
250 tons, Recife
1000 tons, Santos
CHESTNUT EXTRACT—2,232 bgs, Barkey Importing Co, Genoa
CHLORINATED RUBBER—800 bgs, Chemical Manufacturing Co, Liverpool
CINNAMON QUILLS—60 bls, Curacao Trading Co, Colombo
10 bls, Max Van Pels, Colombo
CLAY, CHINA—1,344 bgs, Anglo American Clays Corp, Avonmouth
COBALT OXIDE—202 cs, Antwerp
COBALT POWDER—25 dms, C Hardy, Havre
COCONUT OIL—84 tons, Fallek Products Co, Rotterdam
502 tons, American Trust Co, Cebu
COCONUT SHELL CHARCOAL—600 bgs, American Overocean Corp, Kingston
COD OIL—200 dms, Ottol Oil Co, St Johns
100 dms, Scandinavian Oil Co, St Johns
CODLIVER OIL—120 dms, Peder Devold Oil Co, Leixoes
146 dms, Interocean Chemical & Minerals Corp, Leixoes
COPAL GUM—60 bgs, Wm H Scheel, Singapore
75 bgs, O G Innes Corp, Singapore
CORIANDER SEED—200 bgs, W Mahneke, Casablanca
CORN OIL—340 tons, Corn Products Co, Rotterdam
CUTTLEFISH BONE—130 cs, Morgan Guaranty Trust Co, Kobe
DAMMAR GUM—50 cs, S Winterbourne & Co, Bangkok
70 bgs, O G Innes Corp, Singapore
DIGRAS—20 cs, Duke Lab, Bremen
10 dms, James E Fox, Genoa
10 dms, Genoa
DEXTRIN—320 bgs, Morningstar Paisley Inc, Amsterdam
200 bgs, Stein Hall & Co, Rotterdam
270 bgs, Rotterdam
DILL SEED—110 bgs, Levy & Levis Co, Bombay
80 bgs, S B Penick & Co, Bombay
45 bgs, Archibald & Kendall, Bombay
DIPHENYLENE OXIDE—42 cks, Terra Chemicals Inc, Rotterdam
ETHYLHEXANDIOL—35 dms, Henley & Co, Bremen
EUPHORBIA—10 bls, Norwalk Mills, Tuticorin
FENNEL SEED—171 bgs, Levy & Levis Co, Bombay
491 bgs, M J Golombeck, Bombay
85 bgs, Louis Furth, Bombay
70 bgs, Kellys America Ltd, Bombay
172 bgs, Istanbul

GELATIN—443 bgs, Manhattan Adhesives Corp, Antwerp
940 bgs, T M Duche & Sons, Antwerp
35 dms, H Bruckmann & Lorbacher, Rotterdam
200 bgs, T M Duche & Sons, Copenhagen
300 bgs, King Shipping Co, Gothenburg
51 bbls, Riches Nelson, Antwerp
840 bgs, First National Boston, Hamburg
56 dms, W Koepff, Hamburg
73 dms, B Young, Avonmouth
50 cks, Havre
GHATTI GUM—168 bgs, P A Dunkel, Bombay
GINGER—387 bgs, K H Landes & Co, Kingston
56 bgs, Produce Dealers Corp, Kingston
88 bgs, Meer Corp, Kingston
60 bgs, C M Van Sillevoldt, Kingston
57 bgs, Fritzsche Bros, Kingston
57 bgs, Mincing Trading Corp, Kingston
60 bgs, Louis Furth, Kingston
80 bgs, Louis Furth, Cochin
400 bgs, East India Trading Co, Cochin
80 bgs, Cochin
805 bgs, Freetown
GLYCERINE—300 tons, Procter & Gamble Co, Manila
GRAPHITE—250 bgs, Asbury Graphite Mills, Colombo
600 bgs, Joseph Dixon Crucible Co, Bremen
500 bgs, Eagle Pencil Co, Bremen
GUAR GUM—26 bgs, Wedeman & Godknecht, Genoa
GYPSUM—800 bgs, C B Chrystal Co, Liverpool
GYPSUM, CRUDE—16,383 tons, National Gypsum Co, Halifax
HOOF & HORNMEAL—700 bgs, Martin Baer & Co, Santos
2,000 bgs, Rio de Janeiro
IODINE, CRUDE—375 cs, Philipp Bros Far East Inc, Yokohama
IPECAC ROOT—11 bgs, S B Penick & Co, Rio de Janeiro
11 bgs, Meer Corp, Rio de Janeiro
10 bgs, J M Rodriguez, Balboa
IRON OXIDE—2,392 bgs, Reichard Coulston, Malaga
400 bgs, C B Chrystal Co, Malaga
1,323 bgs, Malaga
KARAYA GUM—60 bgs, Meer Corp, Bombay
60 bgs, P A Dunkel, Bombay
63 bgs, L A Champon & Co, Bombay
124 bgs, Block Drug Co, Bombay
62 bgs, S B Penick & Co, Bombay
310 bgs, Stein Hall & Co, Bombay
124 bgs, Nehis & O'Connell, Bombay
497 bgs, Colony Import & Export Corp, Bombay
KOLA NUTS—200 bgs, D Steengrafe & Co, Kingston
356 bgs, Lagos
LAVANDIN OIL—30 dms, Marseille
LAVENDER OIL, SPIKE—10 dms, L A Champon & Co, Barcelona
LEAD, RED—300 bgs, Rotterdam
LEAD, WHITE—700 bgs, Rotterdam
LEMON PEEL—39 bls, Meer Corp, Alicante
68 bls, F D Keller & Son, Alicante
LITHOPONE—100 bgs, C J Osborn Co, Rotterdam
LIVERMEAL—200 bgs, New Plymouth
448 bgs, Bluff
400 bgs, Wellington
LOCUST BEAN GUM—472 bgs, Stein Hall & Co, Genoa
300 bgs, Meer Corp, Genoa
100 bgs, Nehis & O'Connell, Genoa
200 bgs, P A Dunkel, Rotterdam
1,364 bgs, J L Quesada, Valencia
150 bgs, T M Duche & Sons, Rotterdam
200 bgs, Portimao
200 bgs, Barcelona
MAGNESIUM CARBONATE—400 bgs, Reheis Co, Liverpool
42 cs, Lo Curto & Funk, Antwerp
MARJORAM LEAVES—60 bls, Louis Furth, Marseille
MASTIC GUM—20 cs, S B Penick & Co, Piraeus
MENTHOL—20 dms, George Uhe Co, Marseille
175 cs, Lo Curto & Funk, Santos
180 cs, American Far Eastern Syndicate, Santos
150 cs, Schwabach & Co, Santos
50 cs, Fritzsche Bros, Santos
METHOXY BUTANOL—55 dms, Wedeman & Godknecht, Rotterdam
MOLYLBDENUM DISULFIDE—1 dm, Acheson Colloids Co, Liverpoool
MONOCHLOROACETIC ACID—100 dms, Wedeman & Godknecht, Bremen
MONOCRESYL GLYCERYL ETHER—8 dms, American Cyanamid Co, Liverpool
MUSK, AMBRETTE—10 cs, Antwerp
MUSTARD SEED—214 bgs, P H Petry, Copenhagen
300 bgs, Antwerp
NAPHTHA—73,985 bbls, Humble Oil Co, Las Piedras
NAPHTHALENE—3.125 bgs, American Cyanamid Co, Rotterdam
2,143 bgs, M W Hardy & Co, Rotterdam
715 bgs, Rotterdam
1,188 bgs, Antwerp
NUTMEG—260 bgs, Dodge & Olcott, Singapore
70 bgs, K H Landes & Co, Singapore
28 bgs, J H Elton, Singapore
140 bgs, Singapore
225 bgs, Rotterdam
OCOTEA CYMBARUM OIL—22 dms, L A Champon & Co, Itajai
OLEORESIN PAPRIKA—120 cs, Lo Curto & Funk, Alicante
2 cs, J Weinstein, Alicante
OLIVE OIL—25 dms, Farinella Bros. Barcelona
1,038 dms, Swiss Credit Bank, Malaga
24 dms, Chase Manhattan Bank, Malaga
24 dms, J H Schroder, Malaga
100 dms, Bank of America, Seville
149 dms, Atlantic Bank of N Y, Seville
100 dms, Swiss Credit Bank, Seville
100 cms, Uddo & Gramm, Barcelona
50 dms, Hanover Bank, Seville
61 dms, Bankers Trust Co, Seville
98 dms, J H Schroder, Seville
25 dms, Seville
ORANGE OIL, BITTER—11 cs, Fritzsche Bros, Kingston
PALMAROSA OIL—2 dms, Givaudan Corp, Bombay
PALM OIL—100 dms, Colgate Palmolive Co, Matadi
349 tons, Matadi
PALMKERNEL OIL—2,143 cs, B M T Commodity Corp, Rotterdam
324 tons, Matadi

PAPRIKA—125 bgs, Manufacturers Trust Co, Alicante
250 bgs, J Raphael & Sons, Alicante
68 bgs, A A Sayia, Alicante
200 bgs, Meer Corp, Alicante
20 bgs, A Bier, Alicante
335 bgs, J Raphael & Sons, Hamburg
120 bgs, National City Bank, Hamburg
PEPPER, BLACK—240 bgs, A G Dunn, Alleppey
1,040 bgs, Internatio Rotterdam, Cochin
160 bgs, A G Dunn, Cochin
160 bgs, Ludwig Mueller, Cochin
30 bgs, J H Elton, Singapore
140 bgs, J F Frank, Singapore
140 bgs, C M Van Sillevoldt, Singapore
420 bgs, Internatio Rotterdam, Singapore
1,072 bgs, Alleppey
PERCHLOROETHYLENE—356 tons, International Selling Corp, Marseille
PHENOBARBITAL—20 cs, Copenhagen
PHTHALIC ANHYDRIDE—1,356 bgs, Toms River Chemical Corp, Rotterdam
2,660 bgs, Hudson Shipping Co, Copenhagen
POLYVINYL ALCOHOL—380 bgs, Kobe
POLYVINYL CHLORIDE—400 bgs, B F Goodrich Co, Havre
POPPYSEED—150 bgs, Louis Furth, Gdynia
250 bgs, H J Spitz, Gdynia
100 bgs, P H Petry, Copenhagen
250 bgs, C M Van Sillevoldt, Rotterdam
200 bgs, M J Golombeck, Rotterdam
300 bgs, Rotterdam
POTASH, CAUSTIC—151 dms, Antwerp
185 dms, Rotterdam
POTASSIUM FERROCYANIDE—500 bgs, Haras Co, Rotterdam
POTASSIUM PERCHLORATE—109 dms, Ugine Industries, Havre
PSYLLIUM SEED—262 bgs, Meer Corp, Bombay
PSYLLIUM SEED HUSKS—1,110 bgs, Meer Corp, Bombay
529 bgs, Parke Davis & Co, Bombay
QUEBRACHO EXTRACT—1,017 bgs, Barkey Importing Co, Buenos Aires
RICE BRAN WAX—110 bgs, Yokohama
ROSE BUDS—158 bgs, S B Penick & Co, Casablanca
SAGO FLOUR—236 bgs, Morningstar Paisley Inc, Singapore
SANDALWOOD OIL—23 cs, National City Bank, Cochin
5 cs, National City Bank, Bombay
17 cs, Lo Curto & Funk, Cochin
10 cs, Marine Midland Trust Co, Cochin
7 cs, Lo Curto & Funk, Bombay
3 cs, Fritzsche Bros, Bombay
26 cs, Cochin
SEEDLAC—250 bgs, Wah Chang Corp, Bangkok
250 bgs, Bradshaw Prager, Calcutta
450 bgs, Calcutta
250 bgs, Bangkok
SENNA LEAVES—67 bls, Wm E Martin & Sons, Port Sudan
SESAME SEED, HULLED—100 bgs, R J Spitz, Alexandria
SODA, CAUSTIC—360 dms, B T Chemco Inc, Gothenburg
SODIUM CHLORIDE—100 dms, Wedeman & Godknecht, Hamburg
SODIUM SILICOFLUORIDE—200 bgs, Rotterdam
SODIUM SULFATE—3.000 bgs, Lo Curto & Funk, Antwerp
SPERM OIL—450 tons, Arista Oil Products Corp, Glasgow
STARCH—600 bgs, National Starch & Chemical Corp, Rotterdam
STEARYL ALCOHOL—40 bgs, Aceto Chemical Co, Copenhagen
441 bgs, A & S Corp, Kobe
STYRAX GUM—10 cs, Givaudan Corp, Istanbul
SULFAMIC ACID—220 bgs, H Bruckmann & Lorbacher, Bordeaux
SULFONILAMIDE—40 cks, Liverpool
TALC—441 bgs, Whittaker Clark & Daniels, Bordeaux
300 bgs, C B Chrystal Co, Bombay
823 bgs, Whittaker Clark & Daniels, Bombay
2.280 bgs, Charles Mathieu, Genoa
400 bgs, C B Chrystal Co, Bordeaux
750 bgs, L A Salomon & Bro, Bordeaux
TANNING EXTRACT—100 bgs, Tac Tannins & Chemicals Inc, Bordeaux
TAPIOCA—1,100 bgs, Morningstar Paisley Inc, Itajai
551 bgs, Stein Hall & Co, Itajai
961 bgs, American Key Products, Itajai
TAPIOCA FLOUR—2,606 bgs, Zilkha & Sons, Lome
672 bgs, Morningstar Paisley Inc, Kohsichang
6,160 bgs, American Agencies, Kohsichang
672 bgs, Geismar & Co, Bangkok
3.642 bgs, Stein Hall & Co, Itajai
260 bgs, Manhattan Adhesives Corp, Itajai
8.064 bgs, Stein Hall & Co, Kohsichang
TARTARIC ACID—2,000 bgs, Leonhard & Brush, Barcelona
THEOBROMINE—22 dms, Lo Curto & Funk, Rotterdam
THYME LEAVES—40 bls, Louis Furth, Marseille
TUNG OIL—399 tons, Bunge Corp, Buenos Aires
99 tons, Buenos Aires
TURMERIC—56 bgs, Kellys America Ltd, Kingston
140 bgs, M J Golombeck, Port Au Prince
58 bgs, Louis Furth, Cochin
80 bgs, M J Golombeck, Cochin
57 bgs, P H Petry, Madras
114 bgs, East India Trading Co, Madras
80 bgs, Von Bonn & Co, Cochin
240 bgs, Kellys America Ltd, Alleppey
160 bgs, A G Dunn, Cochin
240 bgs, S B Penick & Co, Cochin
80 bgs, M J Golombeck, Cochin
400 bgs, Cochin
240 bgs, Alleppey
UREA—1,320 bgs, Cosmos Shipping Co, Yokohama
VANILLA BEANS—142 cs, Pacific Triangle Co, Semarang
VALONIA CUPS—5.912 bgs, Izmir
WATTLE EXTRACT—2.231 bgs, International Products Corp, Beira
YACCA Glue—[illegible] Adelaide
ZINC OXIDE—700 bgs, C B Chrystal Co, Marseille

Los Angeles

ARROWROOT—1,200 bgs, Morningstar Paisley Inc, Inc, Port of Spain
CASEIN—1,100 bgs, Borden Chemical Co, Buenos Aires
CASTOR OIL—500 tons Baker Castor Oil Co, Recife
COPRA—500 tons Cargill Inc, Cebu
2,240 bgs, Balfour Guthrie, Manila
2,000 bgs, Wilbur Ellis Co, Manila
CORN STARCH—150 bgs, Geismar & Co, Amsterdam
FISHMEAL—2,174 bgs, F P Dow, Chimbote
2,174 bgs, S Pacific Canning Co, Chimbote
2,174 bgs, Balfour Guthrie, Chimbote
IRON OXIDE—225 bgs, Liverpool
MAGNESIUM CARBONATE—20 cs, H Hartrys, Antwerp
PALM OIL—369 tons, Port Swettenham
QUEBRACHO EXTRACT—200 bgs, International Products Corp, Buenos Aires
784 bgs, Tanimex Corp, Buenos Aires
TAPIOCA FLOUR——14,064 bgs, Stein Hall & Co, Kohsichang
ZINC OXIDE—3,200 bgs, Westco Chemicals Inc, Liverpool

Philadelphia

ASBESTOS FIBER—1,100 bgs, Davies Turner & Co, Lourenco Marques
1,187 bgs, Davies Turner & Co, Durban
BONE—2,000 bgs, Calcutta
3,692 bgs, Karachi
CALCIUM CARBONATE—1,600 bgs, Antwerp
CALCIUM PHOSPHATE DIBASIC—970 bgs, Wessel Duval & Co, Antwerp

CETYL ALCOHOL—300 cs, A & S Corp, Yokohama
CLAY, CHINA—3,200 tons, Fowey
GYPSUM, CRUDE—8,878 tons, U S Gypsum Co, Hantsport
IRON POWDER—100 dms, Eastos Metal Corp, London
MANGROVE EXTRACT—1,200 bgs, Saxe Cutch Corp, Singapore
PYRETHRUM FLOWERS—250 bls, Mombasa
PYRETHRUM EXTRACT—91 dms, Mombasa
SHELLAC—200 bgs, Mantrose Corp, Bremen
SULFUR, CRUDE—4,160 tons, E I Dupont De Nemours & Co, Contzacoalcos
TALC—2,690 bgs, Moore & Munger, Bordeaux
TAPIOCA FLOUR—829 bgs, Morningstar Paisley Inc, Bangkok
VANILLA BEANS—100 cs, Zink & Trieste, Tampico
WATTLE EXTRACT—1,665 bgs, International Products Corp, Beira
341 bgs, Tanning Chemical Co, Dar es Salaam
1,131 bgs, Barkey Importing Co, Dar es Salaam
1,539 bgs, International Products Corp, Durban
ZINC OXIDE—1,200 bgs, Pigment Chemical Co, London

San Francisco

BONEMEAL—206 tons, Stauffer Chemical Co, Buenos Aires
CASEIN—200 bgs, Borden Chemical Co, Buenos Aires
COPRA—2,050 tons, Cargill Inc, Cagayan de Oro
750 tons, Cargill Inc, Ozamis
500 tons, Cargill Inc, Dipolog
2,200 tons, Cagayan de Oro
CREAM OF TARTAR—60 dms, Genoa
DEXTRIN—50 bgs, Stein Hall & Co, Rotterdam
FISHMEAL—4,348 bgs, Marine & Animal By-Products, Supe
6,522 bgs, Marine & Animal By-Products, Callao
2,174 bgs, Marine & Animal By-Products, Chimbote
4,348 bgs, Wilbur Ellis Co, Callao
6,522 bgs, Albumina Supply Co, Matarani
4,348 bgs, Olavarria & Co, Chimbote
4,348 bgs, Balfour Guthrie, Chimbote
2,174 bgs, S Pacific Canning Co, Chimbote
2,174 bgs, Callao
GYPSUM, CRUDE—10,327 tons, Kaiser Gypsum Co, San Marcos
MOLASSES—1,652 tons, California Molasses Co, Victorias
862 tons, California Molasses Co, Manila
NUTMEG—70 bgs, California Commodities Corp, Singapore
OITICICA OIL—250 tons, Fortaleza
OLIVE OIL—48 dms, Seville
OREGANO—200 bgs, H M Newhall & Co, Salina Cruz
PEPPER, BLACK—630 bgs, Singapore
POLYVINYL ALCOHOL—300 bgs, Kobe
QUEBRACHO EXTRACT—1,037 bgs, Barkey Importing Co, Buenos Aires
SESAME SEED—50 bgs, Wm E Martin & Sons, Corinto
TAPIOCA FLOUR—1,904 bgs, H M Newhall & Co, Kohsichang
TARTARIC ACID—20 bgs, Genoa

Allied Chemical Starts Up Its Third 'Genetron' Plant

Allied Chemical Corporation's General Chemical Division has started production of "Genetron" fluorinated hydrocarbon refrigerant and aerosol propellants from a new multi-million dollar plant at its Elizabeth, N. J., works.

With a capacity well in excess of 10,000 tons-a-year, the plant is General Chemical's third "Genetron" producing facility, Allied points out. It will supply customer requirements in the northeast. The two others are at Baton Rouge, La., and Danville, Ill.

Chemical Shipping

—Continued from page 5

and fuels are also in line for a gigantic foul-up if the strike persists.

As it stands now, by government ruling, shipments of International Cooperation Administration materials, including large volumes of insecticides and fertilizers, must be transported in American flag ships.

Further, deliveries from the US to Hawaii and Puerto Rico must be made in US vessels. A strike of any duration could be a serious matter for the Pacific and Caribbean islands.

Overseas shipments of chemicals are being transferred to ships of foreign registry. Overall cargo demand on shipping could tighten the international market and send chartering rates sky high should the mariners here remain out of work long.

Despite the strong efforts of Secretary of Labor Arthur J. Goldberg to bring all sides of the dispute to an early accord, there is a great deal of pessimism among chemical forwarders.

One New York shipper expressed hope last Friday that Secretary Goldberg's efforts would put an end to the strike. But it was his feeling that the nature of the dispute was such that a strike wasn't the answer.

British Fertilizer Quotations

—Continued from page 4

pany, Ltd., slashed its line of compounds $4.20 a ton to $100.84 a ton.

Price reductions were blamed on poor sales last season, the result of unfavorable weather conditions, as well as on the gradual reduction in fertilizer subsidies paid by the UK government directly to farmers.

With only 20 percent of the market, behind Fisons' 40 percent, ICI has been fighting hard to increase its share.

The trade is now watching to see if ICI will match Fisons' 35-cent increase in early delivery rebates. Fisons announced rebates of $4.90 a ton for fertilizers delivered in July.

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